

Urgent call for completion of all phases of dam expansion

By LIEW JIA XIAN
jiaxian@thestar.com.my

PENANG is still waiting for the Federal Government to complete the remaining two phases of the Mengkuang Dam expansion project.

Penang Water Supply Corporation (PBAPP) chief executive officer Datuk Jaseni Maidinsa said PBAPP had advised the state government to accept a conditional handover of the Mengkuang Dam, provided the Federal Government confirmed its commitment to complete and commission phases 2B and 2C of the expansion project.

“The dam per se has been expanded, but this represents only one of four key phases.

“Without the commissioning of the remaining two phases, the entire expansion project cannot function fully as Penang’s strategic drought solution,” he said in a recent statement.

He added that phase 1, which is Mengkuang Dam expansion and associated works to increase the maximum raw water storage capacity from 22 billion litres (BL) to 73.5BL, cost RM607mil and was completed on April 10, 2017.

Phase 2A, which is the upgrading of the Mak Sulong pumping station and associated works to increase



Only phases 1 and 2A of the Mengkuang Dam expansion project are completed so far.

raw water pumping capacity (from 200 million litres per day, or MLD, to 400 MLD), cost RM63.5mil and was completed on Sept 28, 2017.

Phase 2B involves the laying of 7km of 1.6m diameter mild steel pipelines from the Mak Sulong pumping station to the Sungai Dua canal to upgrade raw water delivery capacity from 300 MLD to 600 MLD.

Jaseni added that the phase is critical to enable the delivery of more raw water from the dam to

the Sungai Dua Water Treatment Plant during the dry season.

“It is estimated to cost RM100mil. During a meeting on April 2, 2018, the Federal Government had agreed to undertake this phase which is expected to be completed in 2022.

“Phase 2C, which is the construction of the 440 MLD Lahar Yooi pumping station and associated works, is important to expedite refilling the dam, by pumping excess raw water from

Sungai Muda during the wet season.

“It is estimated to cost RM80mil and during a meeting on April 2, 2018, the Federal Government agreed to undertake this phase.”

As of June 24 this year, the effective capacity of the Mengkuang Dam was 84.5% and the effective storage was 67,654 million litres of water.

Jaseni explained that without the phase 2B pipelines, the maximum volume of water that may be drawn down from the dam daily is limited to 300 MLD.

“Penang’s average daily water consumption was 843 MLD in 2019. As such, 300 MLD is obviously not enough to meet Penang’s treated water needs during an emergency drought scenario.

“The Federal Government has agreed to build a new RM100mil barrage across Sungai Muda, in Rantau Panjang, in a meeting on April 2, 2018.

“It will replace the existing 47-year-old barrage which is to prevent seawater incursion, as well as to help sustain optimal river levels during the dry season.

“It should be noted that this is a Federal project. In 2011, the Federal Government agreed to fund and undertake the project, in accordance with agreements signed by Penang for migration to

the National Water Services Restructuring Initiative (NWSRI).

“The dam expansion project is meant to provide Penang with an expanded and comprehensive strategic drought solution, to mitigate the risks of climate change and increasing water demand.

“Although the Mengkuang Dam capacity has been enlarged, the maximum drawdown is still 300 MLD, and we cannot refill it quickly, as yet.

“Nevertheless, the state is ready to accept a conditional handover of the Mengkuang Dam,” he said, adding that PBAPP had sent an official letter to the Chief Secretary of the Environment and Water Ministry, dated March 25 this year, outlining all of Penang’s conditions for a conditional handover.

Meanwhile, Chief Minister Chow Kon Yeow said Mengkuang Dam is an important and strategic dam for the Penang water supply network, and that the Penang Water Authority is working closely with the relevant Federal agencies to achieve this objective.

“The state government hopes that the remaining components of the project will be completed as soon as possible so that we can ensure the safety of water supply in the state,” he said, during a site visit to the dam recently.