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Media Release

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PENANG CHIEF MINISTER.

PBAPP'S GREEN AND SMART SOLUTION TO RESOLVE A 16-YEAR-OLD ISSUE

- **The new Sungai Dua Dewatering Plant (SDDP) will enable the proper handling of water treatment plant (WTP) residue in compliance with DOE regulations at a fraction of conventional disposal costs.**

PENANG, Sunday, 23.2.2025: The official opening of the Sungai Dua Dewatering Plant (SDDP) resolves a 16-year-old issue in an environment-friendly and cost-effective manner.

I am pleased to officially open this new RM20 million facility in the Sungai Dua Water Treatment Plant (WTP). It is a facility that will dewater, process and dispose of WTP residue every day without compromising the environment.

However, the marvellous aspect of the SDDP is that it is able to “handle” the WTP residue at a cost of RM145 per metric ton (mt) ...which is very much cheaper than the projected cost of RM550 per mt for the disposal of unprocessed WTP residue.

When we take into account the massive amount of WTP residue that is generated in the Sungai Dua WTP annually, the waste disposal cost savings will be between RM60 million and RM70 million a year, from 2025.

High costs of disposing WTP residue

As I understand it, every WTP that employs conventional water treatment technology generates WTP residue as a by-product of its operations.

Since 2009, the Department of Environment (DOE) has urged all Malaysian water supply operators (including PBAPP) to dispose WTP residue in a “Class 4 Sanitary Landfill”. I have been told by PBAPP that almost all Malaysian water supply operators have not complied due to the high disposal costs involved.

In 2021, it was estimated that all the WTPs in Malaysia generated a total of 5,500mt of WTP residue per day or about 2.1 million mt a year.

In 2024, if PBAPP had complied with DOE regulations, it would have incurred additional costs of more than RM90 million a year to dispose about 450mt of unprocessed WTP residue from Sungai Dua at an estimated cost of RM550 per mt. This RM90 million in additional water supply cost would inevitably be “passed on” to Penang water consumers in the form of significantly higher water rates.

PBAPP’s green and smart solution

It is good to note that PBAPP decided to implement a sensible solution to address the WTP residue issue at a fraction of projected costs.

This SDDP was built by Alam Aliran Kualiti Sdn Bhd (AAK), a scheduled waste management and waste water treatment company, in the Sungai Dua WTP. Hence, there are no land costs involved.

AAK’s bid to build the SDDP was selected in an open “request for proposal” exercise in 2022. This Penang-based company has the relevant expertise and track record to get the job done safely and properly. AAK is operating 3 waste “recovery facilities” in the Bukit Minyak Industrial Area.

On its part, PBAPP has signed a 15-year contract with AAK to process the WTP residue in the Sungai Dua WTP. PBAPP will oversee the operations of the SDDP to ensure that the facility and its “end-product” comply with DOE regulations.

I would like to commend PBAPP for implementing a green and smart WTP residue solution that supports the aspirations of the Penang2030 vision.

The SDDP is “green” in the sense that it enables safer processing and disposal of a high volume of WTP residue in a manner that is more environment-friendly; and which complies with DOE regulations. It is “smart” because it involves a win-win partnership arrangement that optimises costs and resources for PBAPP and AAK.

By saving cost for PBAPP, this SDDP will also help to ensure that future water rates in Penang remain moderate for the benefit of the people, as we march on towards a more environment-friendly future.

Thank You.

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