

## Tests show residue from Sungai Dua water treatment plants not hazardous

By Audrey Dermawan - May 7, 2021



*Penang Sustainable Natural Heritage Association (Lekas) voiced its concern over the handling of sludge with metal contents, which it feared was flowing into Sungai Prai, from the SDWTP. - STR/DANIAL SAAD*

GEORGE TOWN: The Penang Water Supply Corporation (PBAPP) has assured that the water treatment residue, discharged from the Sungai Dua Water Treatment Plant (SDWTP) into a tributary of Sungai Prai, is not hazardous to human beings and the aquatic environment.

This came after the Penang Sustainable Natural Heritage Association (Lekas) voiced its concern over the handling of sludge with metal contents, which it feared was flowing into Sungai Prai, from the SDWTP.

According to PBAPP chief executive officer Datuk Jaseni Maidinsa, the main content of the WTP residue is residual aluminium resulting from the use of aluminium sulphate or polyaluminium chloride for the coagulation process in conventional water treatment.

He said the Sungai Dua WTP was not the only WTP in Malaysia that discharged WTP residue into rivers.

The National Water Services Commission (SPAN) had estimated that WTPs in Malaysia produced a total of 5,500 metric tonnes of WTP residue per day.

"PBAPP is working closely with the Water and Environment Ministry, SPAN and the Department of Environment (DoE) in handling the water treatment plant residue and ensuring the sustainability of Sungai Prai," he said today.

On Wednesday, Lekas president Zikrullah Ismail had said that they received reports that the Sungai Dua WTP was operating without a sludge lagoon. He said that random checks conducted by Lekas found that a sludge lagoon does not exist.

He had also pointed out that in an article, Network on Water Technology in Asia Pacific (NewTap), it was reported that "Sungai Dua Water Treatment Plant does not treat the backwash water and sludge generated. Backwash water from filters and sludge produced from sedimentation, DAF, and Clarifier systems is channelled into the Prai River without any treatment".

Explaining, Jaseni said the non-hazardous nature of WTP residue was backed up by the following facts:

- in Kyoto, Japan, WTP residue is recycled as "fill material" for children's playgrounds;
- in The Netherlands, WTP residue is recycled as fertiliser and building construction material; and
- in Penang, PBAPP has won awards for completing a research project to produce bricks from WTP residue.

Jaseni said the the Sungai Dua WTP had been operating since 1973, and in the past 48 years, there had been no reported incident of water contamination in Sungai Prai resulting from the discharge of WTP residue.

"If WTP residue was hazardous to the aquatic environment, there would be no fishes in Sungai Prai," he noted.

Meanwhile, in a parliamentary reply to Tanjong member of parliament Chow Kon Yeow in November 2020, the Water and Environment Ministry had stated that WTP residue would eventually be regulated by SPAN under the National Water Services Industry Act 2006 (WSIA).

"The ministry stated that it was in the process of amending the WSIA to include WTP residue as being part of the water supply system, and that its regulation would include provisions for the setting up of common facilities to treat, recycle and/or dispose of WTP residue properly in Malaysia," he added.