



One of the bridges across Sungai Gambut Kecil that was washed away early this year.

River off course

KUALA LUMPUR: Diverting a river is an offence under the Waters Act 1920.

Under sections 5 and 7 of the Act, it is an offence to interfere or divert a river from its natural course without the consent of the state authorities.

The offence carries a maximum fine of RM1,000.

Department of Irrigation and Drainage (DID) coastal engineering division engineer Ong Hon Lim said a hydraulic study must be conducted before a river is diverted.

"When you cut off part of one river and join it to another, you're diverting the supply of sediment it carries. So the receiving river gets more sediment and water."

"The old river will hunger

for sediment and this will disturb the environment. It is like depriving a baby of candy.

"When one place is short of sediment, erosion will definitely occur. The river that's getting too much will be choked with sediment if the flow is not high enough," he said.

The increase in water and sediment volume in the river due to the diversion could cause the water to flow faster to the river mouth.

This, he said, could cause structures to fall if the velocity was high enough and the volume of water large enough.

On the effects of sand mining, Ong said it would take sediment away from the river mouth as well as the banks of the river.

"Sand mining can be done but the quantity cannot be extreme.

"A hydraulic study or an EIA must be done, depending on the size of the area to be mined.

In normal situations, said Ong, sand mining would affect the sediment supply to the beach, resulting in erosion.

River banks, he said, could also collapse if sand was mined beyond the allowed quantity.

"If river banks collapse, this can cause flooding."

In the long term, it could lead to drastic erosion.

"For example, if you now have 10 metres of beach, in two years you could be left with just one metre of beach."

The study

- Perniagaan Usahasama Membalak did not follow some of the EIA conditions, according to the assessment by an independent study commissioned by Pengerang MP Datuk Azalina Othman Said last June.
- All recommendations in the EIA report should be implemented.
- All activities must be within the approved land area.
- Proper drainage should be set up around the mining area to avert erosion.
- A buffer zone of at least 500 metres should be established around the boundary.
- The project should operate from Monday to Friday only during the day.
- No diversion or blockage of water flow in rivers and streams.
- The wheels of trucks must be washed before leaving the site.
- No open burning.
- Detailed study on potential impact on fish and aquatic life to be conducted before mining restarts.
- Bunds to be built at all excavation areas before work is restarted.
- Trees should be planted to screen the mining area from the road.

Other issues

THE study found that misleading information was provided in the EIA regarding the river diversion and the area in which mining was being carried out.

The potential impact of the project on adjacent peatlands and peat fires was not mentioned.

The history

APPROVAL was given by the Kota Tinggi District Land Office to Wanimas Jaya Sdn Bhd in September 2002 for silica sand mining on 141 hectares of peatland and sand dunes in Mukim Pantai Timur.

Wanimas Jaya Sdn Bhd then appointed Perniagaan Usahasama Membalak Sdn Bhd (PUM) to implement the project.

In August 2005, the Department of Environment (DOE) confirmed that no EIA had been prepared and asked the operator to prepare one.

An EIA was submitted in February 2006 and approved by DOE in April 2006 with 45 conditions.

A search at the Companies Commission found that PUM was registered in 1979 and four of its directors also sit on the board of Wanimas Jaya Sdn Bhd. Among those listed as Wanimas Jaya Sdn Bhd's directors was Datuk Md Zahari Md Zin who was director of Johor Land and Mines department from 2001 to 2003. He was appointed director in 2005.



A silica mining project in Johor.