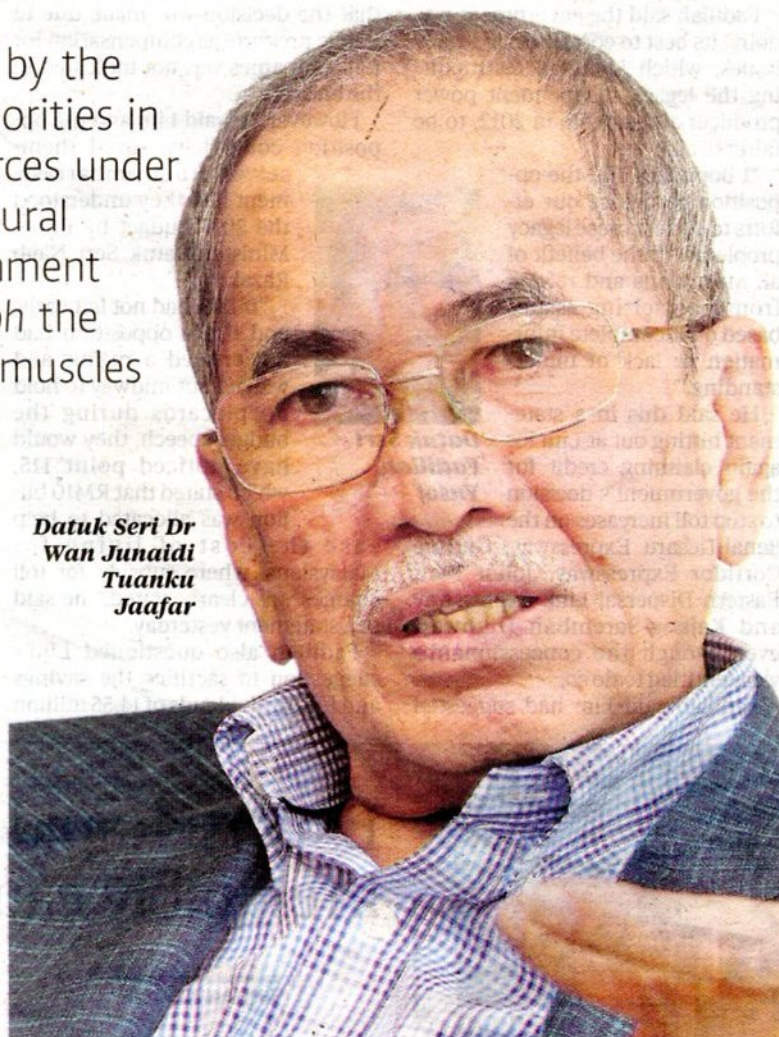


Protecting our water sources

ACTION: Exasperated by the inaction of state authorities in preserving water sources under their purview, the natural resources and environment minister tells June Moh the ministry is flexing its muscles to tackle the problem

IN an interview with *New Sunday Times*, its minister, Datuk Seri Dr Wan Junaidi Tuanku Jaafar, says that the frustration of millions of consumers over poor water supply management and pollution of the resource must be addressed with the greatest political will.

**Datuk Seri Dr
Wan Junaidi
Tuanku
Jaafar**



Q: Why do we need to replace the Environmental Quality Act 1974 (EQA)?

A: EQA was enacted when the country was transforming from an agricultural-based economy to an industrial economy. The current provisions of our environmental law are not able to regulate activities which were not included then.

The rapid development of our country since the 1980s has impacted the load capacity of our rivers. The pollutants that enter the river are accumulating year by year, hence, the quality of river water is deteriorating.

Industrial waste makes up of 20 per cent of the total source of pollutants in the river, while 80 per cent of pollutants come from other sources such as surface run-off, agriculture, farming, development of land, commercial and other activities that are not regulated under EQA.

From January to September this year, the Department of Environment (DOE) had taken 148 cases to court due to water pollution under the EQA's jurisdiction. These court cases involved parties in Selangor, Johor, Malacca, Negri Sembilan and Terengganu.

Q: What are the recommended buffer zone guidelines in industrial areas for rivers and water treatment plants?

A: Through DOE, we will introduce the Siting and Zoning of Industries and Residential Areas Guidelines. This introduces the concept of a buffer zone, which is the physical distance separating the industrial areas and sensitive receivers, such as residential areas, schools, places of worship and water treatment plants.

The industries will be categorised into five areas: high-risk industries must have a buffer zone of at least 1km or more, heavy industries are required to have a 300m buffer zone or more, medium industries must have a 150m buffer zone or more, light industries are required to have

a 50m buffer zone or more, and cottage industries' buffer zones can be around 10m or less.

By enforcing this, it will prevent pollution to the environment.

Q: Are development and commercial activities around raw water sources (for example, Kampung Sungai Buah in Dengkil) adhering to the buffer zone guidelines?

A: There is no buffer zone in Sungai Buah. It is costly to maintain a buffer zone because we develop every inch of the land.

This is why a proper study has to be conducted before creating industrial areas. When we started our industrial economy, we did not plan and design industrial areas properly.

We did have buffer zone guidelines before, but nobody had adhered to it because the guidelines are not law. But DOE cannot enforce guidelines, it is up to the local authority to decide on the enforcement.

The recent incident (on the Sungai Semenyih river pollution) has taught us a good lesson on the importance of the enforcement of buffer zones.

In the new guidelines, we propose that a non-pollutant industry be used as buffer zone for the pollutant industry due to space constraints.

Q: What are some of the loopholes in the current standard operating procedures (SOP) for water treatment plant operators?

A: The SOP of water treatment plants are not standardised

throughout the country. Shutting down a water treatment plant is solely the decision of the operator. Furthermore, some of the technology used by the operators are outdated.

The criteria and parameters used by the operators to shut down the plants have to be reviewed too. In the case of Semenyih, the detection of the odour must be specified first. Operators must ensure the parameters of odours that could lead to the shutdown of the water treatment plant.

The shutdown process cannot depend solely on the presence of odours without identifying the type of smell. Odour analysis should follow the provisions of the new guidelines.

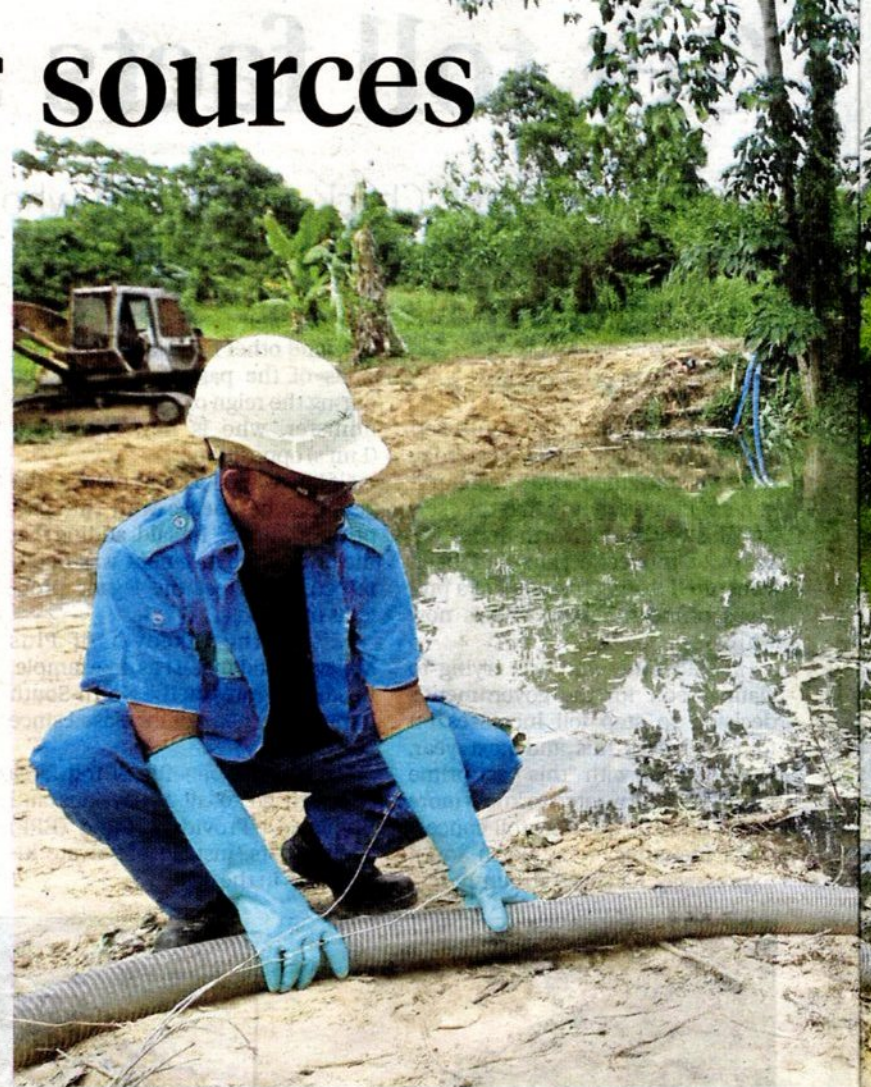
Q: When will the SOP be reviewed?

A: Water treatment plants come under the jurisdiction of the Energy, Green Technology and Water Ministry (KeTTHA) and the National Water Services Commission. We are proposing to KeTTHA to review the SOP to accommodate the current industrial and environmental requirements.

Q: What are some of the things that will be added to strengthen the new SOP?

A: We will emulate European practices, where there is central waste processing and cleaning system, where all industrial waste has to be sent to before being disposed of, in every industrial estate.

This plant's function is to clean the



waste before disposing them accordingly.

This is easy for the authorities to monitor waste disposal activity.

Q: If pollution at Sungai Semenyih continues, it probably will not survive over the next three years. How can we stop the pollution?

A: Under the 11th Malaysian Plan, DOE has been given a mandate to conduct a study on Total Maximum Daily Load (TMDL), which is the value of the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards.

The TMDL approach is expected to yield a positive outcome to improve water quality of the river and ensure water resources are free from contamination.

Q: What are the best practices across relevant authorities that should be adopted to ensure incidents similar to this will not recur?

A: We will form special teams in every state which will comprise the state DOE, local authorities and (in the case of Selangor) the Selangor Water Management Authority. The special team will work together to investigate water pollution cases and take comprehensive action under the law.

In the case of Sungai Buah, we recommended that the existing operators constantly review the water intake.

Besides, new treatment plants need to be completed with alternative water treatment methods such as activated carbon or other appropriate treatment to reduce the impact of odours.

It is necessary for the authorities to think about alternative sources of raw water that can be used in case of

an emergency.

Q: Do you think there is a need for the authorities to publish their water quality results (like air quality index) on their websites?

A: The ministry is in the process of improving the river water quality monitoring system, particularly for monitoring the quality of river water which is the source for water treatment plants. This includes display of real-time information on water quality for the public.

However, at this moment, the status of water quality in Malaysia can be found in the annual Environmental Quality Report issued by DOE or by contacting the nearest DOE office.

Q: Could the fertilisers used by farmers be the source of contamination of Sungai Buah?

A: Agricultural activities could possibly contaminate the water quality if farmers use pesticides or chemicals excessively during heavy rain seasons.

This could cause surface run-off which brings pollutants to the river.

In this case, agricultural activities were not the source of water pollution.

Q: DOE stated that there were 14 factories that released their industrial waste into Sungai Buah. Previously the state government disclosed that the pollutant was octabromodiphenyl ether. Has the ministry identified which of these factories used this chemical?

A: We have not identified the factory that used octabromodiphenyl ether. The Chemistry Department is assessing the sample.