Experts

Role of University Community in Managing Scheduled Waste

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Malaysia was shocked by an incident involving illegal scheduled waste disposal at Sungai Kim Kim, which has caused environmental and health implications for the communities in Pasir Gudang. In March 2019, the incident caused a major uproar in Malaysia as it impacted a huge number of victims, especially school children. Not long after the incident, 15 drums of sodium cyanide was found to be illegally dumped in an oil palm plantation in Karak. Globally, incidents like these have occurred in Minamata, Japan and Love Canal, United States of America.

These incidents, and a few other incidents, have introduced all of Malaysian with a new vocabulary, scheduled waste. Scheduled waste is any waste that possesses hazardous characteristics and can adversely affect the public health and environment. Legally, scheduled waste is defined as any waste falling within the categories of waste listed in the First Schedule of Environmental Quality (Scheduled Wastes) Regulations 2005. The regulation, which is enforced by the Department of Environment, has been a crucial tool in ensuring proper management of scheduled waste in Malaysia.

Although it has been perceived that medium and heavy industries only generate scheduled waste, it should be noted that higher learning institutions, especially universities, do generate scheduled waste. The volume of scheduled waste generated will not be as large as what other industries generate, but improper management of scheduled waste can negatively impact the environment.

With improper management of scheduled waste, we can envision the impact it brings to the environment. It can pollute watercourse, groundwater, the atmosphere, and land, and it is toxic to humans, plants, and other organisms. It can damage the human’s skin and body tissue while increasing the risk of cancer. Penalties and other legal actions imposed due to improper management of scheduled waste by any organisation, especially universities, will impact their business and reputation.

A university must develop a scheduled waste management system to ensure its proper management. The management system, which involves identification, classification, packaging, labelling, storage, and disposal of scheduled waste, which implies the cradle-to-grave principle, is crucial in handling scheduled waste generated in universities. Every scheduled waste generated through teaching and learning and research and development activities in the universities should end up in licensed disposal facilities.

The government is gearing towards the cradle-to-cradle principle continually improve the management of scheduled waste. The scheduled waste is recovered, reused, recycled or reutilised as much as possible, while the remaining scheduled waste is disposed of legally. With research and development capabilities, universities can play a major role in finding ways to reuse or reutilise the scheduled waste to minimise the disposal.

With a proper management system for scheduled waste in place, the university community should

ensure that scheduled waste is managed sustainably and safely. Procedures and guidelines that have been developed should be adhered to in ensuring that the university's activities will not adversely impact the environment, human, and other living organisms.

The university community should play its role in educating each other in managing scheduled waste. Information such as what is scheduled waste, how it will impact us, and how to manage it, is crucial in creating awareness, thus enhancing the university's handling and managing scheduled waste.

University communities should try their best to reduce the generation of scheduled waste from their activities. Reducing the volume will bring less impact to the environment while reducing the cost and energy spent to manage the scheduled waste generated. It can be done through chemical inventory management, process modification, and volume reduction.

Rapidly developing technologies have caused human reliance on electrical and electronic equipment. Discarded electrical and electronic equipment, commonly known as e-waste, contain hazardous metals that may impact surface and groundwater. Proper disposal of e-waste by university communities, categorised as scheduled waste in Malaysia, can contribute towards sustainable development and environmental improvements.

The scheduled waste incidents around us should provide new insight to university communities in managing scheduled waste following legal and other requirements while working towards a sustainable environment. All parties must work together in creating a better world for our future generations.



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