

Act to be amended to tackle overlapping jurisdictions over environmental issues

PENANG, Mon. — The Environmental Quality Act 1974 may be amended to resolve overlapping jurisdictions and responsibilities of different ministries.

Science, Technology and Environment Deputy Minister Datuk Zainal Dahalan said many environmental concerns involved the Ministries of Health, and Housing and Local Government.

With the amendment, the authorities would be more responsible in handling matters concerning the environment, he said.

"More importantly, the relevant departments can carry out research into environmental issues such as solid waste, domestic waste and scheduled waste management containing polychlorinated biphenyls (PCB)," he said after launching the

international symposium to "Stop PCB" pollution today.

Zainal said PCBs were important to industry, but posed serious health risks as they had been shown to cause cancer in animals.

"PCB can also cause serious non-cancer health problems in animals, including in the immune system, reproductive system, nervous system, endocrine system and others."

PCB was first manufactured in the United States in 1929, and are mixtures of synthetic organic chemicals with the same basic chemical structure and similar physical properties, ranging from oily liquids to waxy solids.

It is used in industrial and commercial applications including in hydraulic equipment, paints, plastics and rubber products, and as pig-

ments in dyes and carbonless copy paper.

Due to its non-flammability, chemical stability, high boiling point and electrical insulating properties, PCB gained importance in the industrial sector.

"Household items such as old fluorescent lighting fixtures, electrical devices and appliances including television sets and refrigerators may contain PCB.

"When these electrical devices become heated, small amounts of PCB may be released into the air," Zainal said.

Waste containing PCB are classified as scheduled waste.

"This is to regulate, monitor and control the generation, storage, transportation, treatment, and disposal of hazardous and toxic waste."

Killer whales most contaminated by PCB

PENANG, Mon. — Killer whales (*Orcinus orca*) are the mammals most contaminated by polychlorinated biphenyls (PCBs), according to Canadian biologist Jackie Hildering.

She said fat-soluble PCB builds up in the whales' tissues and suppress their immune and reproductive systems, disrupt hormone function and cause skeletal abnormalities.

Presenting her paper *Effective Awareness of The Oceans We Share*, she said the northeastern Pacific Ocean off the coast of British Columbia was home to some 700 killer whales.

"This is one of the world's most densely populated areas for killer whales, but they are in trouble."

Hildering added that Canada had banned the import and manufacture of PCB since 1977, and its use was confined to totally enclosed systems.

"PCB was never manufactured in Canada but prior to the ban, about 40,000 tonnes of PCB were imported into the country."

In his paper entitled *Contamination by PCB in Soils from Municipal Dumping Sites in Malaysia*, Mafumi Watanabe from the Centre of Marine Environmental Studies at Ehime University in Japan said PCB caused weight loss, skin lesions, endocrine disruption, reproductive and development toxicities, neurotoxicity and cancer.

"It is the highest source of environmental contaminants.

"As the dioxin-related chemicals are highly toxic, further investigation and emission control of PCB are vital to maintain a safe environment for the next generation," he said.

Consumers' Association of Penang president S.M. Mohamed Idris said

children were at greater risk from PCB exposure.

He said effects on the foetus included shortcomings in foetal and post-natal growth, neurological abnormalities, and delays in the development of gross motor skills.

"Studies in the United States and Taiwan have shown that PCBs can lower the IQ and damage the immune system," Idris said.

He added that in 1985, tests on shellfish collected around Penang island found PCB residues in the range of 400 to 600 parts per billion (ppb), which exceeded the 300ppb limit set by the US Food and Drug Administration.

"In 1998 and 1999, tests on green mussels found in Malaysian coastal waters that flowed through industrial or densely populated areas had higher PCB residues."