

E-waste Management Issue in Asia and the Pacific Region

Shun'ichi Honda, Ph.D

Researcher

Department of Epidemiology, National Institute for Minamata Disease

Tel: +81-966-63-3111, Fax. +81-966-61-1145, E-mail honda@nimd.go.jp

Electric and Electronic wastes (E-waste) are recognised as one of the urgent waste streams, because E-waste has both positive and negative potentials for the environmental conservation. The positive potential is that E-product is composed of various substances of both hazardous and non-hazardous materials which are possible to be recycled and reused as resources if it is dealt with on the environmentally sound management. The negative potential is that E-waste causes the adverse effects to human health and the environment if it is dealt with on the environmentally unsound way.

In last a few years, the environmentally unsound way of E-waste was clearly identified in the certain cities in the Asian countries that E-waste was imported as second-hand products into the cities, dismantled under the environmentally unsound way and caused the serious adverse effects to human health and the environment. The residents in the cities are not aware that the existing manual methods to dismantle E-waste is caused the adverse effects to themselves, despite the fact that the governmental or municipal authorities have barely undertaken some measures, e.g. the preparation of the regulations.

In order to undertake an appropriate approach to tackle E-waste issue in Asia and the Pacific Region, the Basel Convention Regional Centre in China (BCRC China) has implemented the various activities to tackle E-waste issues and develop E-waste mechanism on the environmentally sound management (ESM). As the first activity, BCRC China organised the Asia-Pacific Regional Scoping Workshop on ESM of E-waste in 2002. The workshop released the recommendations how to implement ESM of E-waste.

In addition, BCRC China has implemented the project, entitled "Survey of the import and ESM of E-waste in Asia and the Pacific Region" funded by the Basel Convention Trust Fund for 2003-2004 and the Environment Canada. The participating countries in the project were Cambodia, China, Malaysia, Thailand and Sri Lanka. This project significantly identified that E-waste is dealt with by a micro-collection system because E-waste is still value to be reused and recycled. This micro-collection system means that local recyclers, collectors and scavengers collect E-waste and sell it to secondhand markets, and E-waste seems to be reused and recycled as long as possible. However, this waste stream is on the environmentally unsound way, because only

reusable/recyclable E-waste is well collected, dismantled, remodelled and resold, and other non-reusable/recyclable E-waste is disposed of with municipal solid wastes and to open dumping sites and other rural areas. However, the authorities concerned in the participating countries have been aware to be necessary to undertake the environmentally sound management with a legal framework appropriate for their country situation. Through this project, BCRC China organised the E-waste national workshop in Thailand (20 Jan 2005), China (2 June 2005) and Sri Lanka (14 Nov 2005) in order to encourage the national mechanism. In addition, BCRC China have included some components with regard to E-waste in the project "A New Partnership with Local Authorities for the Environmentally Sound Management of Hazardous and other Wastes in Urban Areas", which was supported by the Basel Convention Trust Fund for 2003-2004.

The environmentally sound management for E-waste in Asia and the Pacific region is still beginning stage and solely approached by each country. One of the reasons is that the transboundary movement of E-waste is controlled by the Basel Convention and it is expected to be necessary for the time to follow the procedures of the transboundary movement. Basically, the country which does not have appropriate facility for E-waste can apply the transboundary movement destined for recycling and reusing E-waste to a country which has a facility on the environmentally sound management for E-waste. However, there is only few instances of such transboundary movement of E-waste in practice, and most cases of the transboundary movement of E-waste is that E-waste is imported and exported as secondhand products among the countries. After once E-waste is brought to the destination under this kind of the transboundary movement, most of E-waste is not used as secondhand products and is dismantled for recovering precious metals, valuable materials, etc and the other parts which are not recycled and reused are dumped to open dumping sites or finally dealt with by open burning, namely the environmentally unsound way. It is clear that the adverse effects to human health and the environment are occurred at the destinations of the transboundary movements of E-waste under this kind of trade.

E-waste stream in most of the Asian countries are still on the environmentally unsound management. It is suggested that a comprehensive regional approach is necessary to undertake and implement ESM of E-waste, because ESM of E-waste needs to involve various aspects, e.g. the existing local mechanisms, technical matters, political situations, sharing common information, etc. BCRC China dedicates to developing E-waste mechanism on ESM in Asia and the Pacific region with Secretariat of the Basel Convention.

References

The Basel Convention Regional Centre in China www.bcrc.cn
Secretariat of the Basel Convention www.basel.int