

AFEO Midterm Meeting 2019 Environmental Engineering, EIT

Asst.Prof.Dr.Piyanart Sommani

Dept. of Electrical Engineering, Fac. of Engineering, King Mongkut's Institute of Technology Ladkrabang (KMITL)

Foreign Affairs Committee, and Chemical Petrochemical Engineering Committee, EIT



Management of Pollution Problem in Thailand

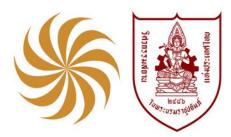


Ministry of Natural Resources and Environment (MNRE) has main mission to prevent and solve pollution problem in Thailand in collaboration with other concerned agencies and networks.

- 20 years National Strategy (2018-2037)
- National Reform Plan
- Twelfth National Economic and Social Development Plan (2017-2021)
- Sustainable Development Goals (SDG)



Balance in aspects of economy, social, quality of life people living, and preserving natural resources and environment.



Thailand State of Pollution

- 1. State of quality of the surface water, coastal water and groundwater
- 2. State of air quality and noise level
- 3. State of municipal solid waste, hazardous waste and hazardous substances



State of Municipal Solid Waste, Hazardous Waste and Hazardous Substances



Situation

1. The proper management of municipal hazardous waste has increased but lacks the support of law or regulations.

Waste Electrical and Electronic Equipment: WEEE (401,300 tons, 65%)

Household hazardous waste, e.g., batteries, dry cell batteries, chemical containers, spray bottles (216,600 tons, 35%)

Municipal Hazardous Waste (618,700 tons)

• Municipal hazardous waste management system: The proper management of municipal hazardous waste has increased 10% or an amount of 60,600 tons. However, this was not adequate. The issuance of regulatory guidelines for segregation municipal hazardous waste from general solid waste and the enforcement of a law requiring responsibility of the private sector for the management of waste from electrical and electronic equipment should be accelerated.

Thailand has been establishing legislation on WEEE, to be in line with the European Union directive, which required manufacturers, distributors and importers to clean up waste.



State of Municipal Solid Waste, Hazardous Waste and Hazardous Substances (cont.)



Situation

2. Industrial waste has been under the proper management system which has a potential to cope with industrial waste countrywide. However, the existing problem of illegal waste dumping should be handled.

Hazardous Waste (1.95 million tons, 6%)



Non-hazardous Industrial Waste (31 million tons, 94%)



Industrial Waste (32.95 million tons)

• There is the distribution of industrial waste treatment and disposal facilities in each region of the country. The highest potential of industrial waste treatment and disposal is in the Eastern part as it is the location of dense industrial plants, followed by the Central, Western, Northeastern, Northern, and the Southern parts. However, the problem of illegal dumping of hazardous industrial waste in old pits, unseen places along the roadsides or in the landfills of general waste needs more monitoring.

Selected Projects for WEEE Management





Public-private cooperation in collecting household hazardous waste

The rising awareness of the private sector about the importance of management of household hazardous waste has led to the following cooperation projects between the public and private sectors in collecting the household hazardous waste and waste from electrical and electronic equipment (WEEE) for appropriate technical treatment and disposal:

 Project on "Return old mobile phones for merits and country development", a cooperation project between the network suppliers (AIS, Dtac, True, Samsung and Sony) and service providers of hazardous waste management (TESAMM, Better World Green Public Co. Ltd., Waste management Siam Ltd, Akkhie Prakarn Public Co. Ltd., Umicore Marketng Services (Thailand) Co. Ltd., Matsuda Sangyo (Thailand) Co. Ltd.) to collect the used mobile telephones from the public and organizations for recycling. The project was launched on 9th February 2017. From the original





amount of WEEE (mobile phone) of 9,800,000 pieces or weighing 1,766 tons per year, in 2017 the amount of collected WEEE was 1,746,000 pieces or weighing 315 tons per year.

Selected Projects for WEEE Management (cont.)



- Project on "Public-private collaboration, hazardous waste segregation", a project to collect household hazardous waste and waste from electrical and electronic equipment starting in Bangkok. The objectives of the project are as follows:
- Providing convenience for the people in segregation hazardous waste from the household.
- Raising awareness of the people about the importance of segregation hazardous waste at the sources up to the destination.





 Department stores and convenient stores will serve as disposal sites of household hazardous waste to be collected by Bangkok Metropolitan Administration for technical treatment and disposal.

The pilot hazardous waste to be included are 5 types of products namely, battery for mobile telephone, waste of mobile telephone, fluorescent lamps, battery for dry cell and hazardous substance contaminated containers such as spray bottles. Presently, there are 2,718 disposal points for hazardous waste in Bangkok.



Selected Projects for WEEE Management (cont.)





- <u>Project on "the efficiency improvement of WEEE sorting and recycling factory"</u>, collaborated between the Department of Industrial Works (DIW), Ministry of industry, and the WEEE sorting and recycling factories.
 - Mar 26, 2018: The DIW signed MOU with the WEEE sorting and recycling factories under the efficiency improvement of WEEE sorting and recycling factory project.





 Apr 1, 2019: The DIW set up the seminar on the efficiency improvement of WEEE sorting and recycling factory Project, to raise preparedness and information exchange and also motivate relevant factories to develop WEEE management in compliance with the requirements.

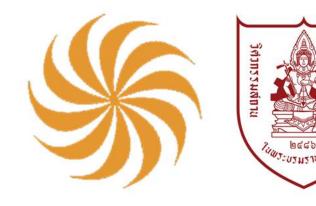




Ref:

http://chechadnews.blogspot.com/2018/03/blog-post_29.htmlhttp://diw.go.th/hawk/showinfo.php?mode=info&id=2460





Thank you

