

# POPs-International Action To Address Dioxins And Furans

## The Thailand – German Dioxin Program

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The developments of Science and Technology lead to more and more widespread uses of chemicals in agriculture, industry, household and other sectors. As other United Nations member countries, Thailand has recognized the problem of chemical hazards as a high priority, particularly the importance of the chemical management under the Chapter 19, Agenda 21. Special attention has been taken on the decisions 18/12 and 19/13A of the UNEP Governing Council on the establishment of legally binding instrument for the Application of the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (or the Rotterdam Convention) as well as the decisions 18/32 and 19/13C of the UNEP Governing Council on the establishment of legally binding instrument for implementing international action on POPs. Following the Second Session of the Intergovernmental Forum on Chemical Safety (IFCS), Ottawa in 1997 Thailand has actively taken actions to reduce or eliminate impacts on human health and the environment related to productions and uses of Persistent Organic Pollutants (POPs) chemicals especially those 12 specified POPs as aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, hexachlorobenzene, mirex, toxaphene, PCBs, dioxins and furans.

### **P r o j e c t      i n i t i a t i o n**

Thailand has recognized the impact of POPs chemicals to human health and the environment is not only the international problem but also a national one. It is well illustrated that, in the past few years, Thailand has taken all possibly actions as recommended by the UNEP Governing Council. At present, all organochlorine pesticides and PCBs are more or less managed in environmentally sound maner. All of 9 pesticides and PCBs, in one hand, have been totally banned and routinely monitored by several agencies. On the other hand, dioxins and furans, is still far behind compared to the developed countries as far as the management is concerned. Thailand believes that the initiation of the dioxins and furans inventory would be the first priority approach for this issue. It has been realized that industrialised countries like Germany have a longstanding experience in implementing chemicals management systems. Thailand has learned that Germany by the German Technical Cooperation (GTZ) has initiated the Pilot Project for the Improvement of Chemicals Management in Developing Countries. The project's task is to provide information on expertise and experience in specific instruments at the request of institutions in developing countries, and to assist in implementing under the specific conditions prevailing in the respective partner country. It is well understood that, dioxins and furans problem is not at all a priority among all other

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environmental issues in Thailand which would reflect as a non-priority for the national fiscal budget allocation. For this reason it brought up Thailand attention to the GTZ Pilot Project. Thailand has requested the following project activities from GTZ in December 1997.

1. Development of inventories for dioxins and furans emissions
2. Establishing a comprehensive system in place to monitor the release of dioxins and furans
3. Establishing the Pollutant Release and Transfer Registers (PRTRs)
4. Development of the national chemical inventories
5. Training on risk assessment and management

Such activities have been identified for possible co-operation under the scope of the GTZ Pilot Project on Chemical Management. The activities on dioxins and furans inventory and monitoring has been approved in February 1998. Following approval, GTZ has arranged meeting and discussion among Thai administrators in this field with the German government and GTZ staff in Germany during 5 - 11 September 1998. In November 1998, GTZ sent an dioxins-expert to visit the Pollution Control Department (PCD) and to help PCD staff drafting a project a little more in detail. The main activities are to make a preliminary list of dioxins and furans sources, how to collect information and prepare the content for the awareness raising workshop for related stakeholders in Thailand.

### Dioxins and furans activity in progress

From February 1999, Thailand has performed the following ;

- Set up a steering committee in order to facilitate this project. The committee includes
  - Pollution Control Department Chairman
  - Department of Industrial Works Member
  - Department of Agriculture Member
  - Department of Health Member
  - Department of Science Service Member
  - Bangkok Metropolitan Administration Member
  - The Industrial Estate Authority of Thailand Member
  - The Federation of Thai Industries Member
  - PCD Staff Secretariate

The functions of the steering committee are

- (1) consider guidelines and procedures for dioxins and furans problems solution,
- (2) prepare dioxins and furans sources inventory,
- (3) prepare the action plan for dioxins and furans monitoring system,
- (4) perform other duties as assigned.

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- PCD staff with cooperation of the German dioxins-expert has prepared a questionnaire related to the dioxins and furans inventory.
- PCD staff has visited staff assigned by each government agency related to the dioxins and furans generation and explained how to complete the proposed questionnaire.
- Up to now, some selected industries have been compiled such as cement plants, power plants, crematoria, non-ferrous metal production from lead plants.
- A week before the Workshop in May 1999, GTZ has kindly asked German experts to visit industries in order to evaluate which industries should be monitored and how to collect the emission samples for dioxins and furans analysis. Those proposed industries are waste incinerator, copper plant, lead plant, aluminum plant, crematorium, cement kiln and steel plant.
- Thailand organized the Awareness Raising Workshop on Polychlorinated dibenzo-p-dioxins and Polychlorinated dibenzofurans (PCDD/PCDF) on 3 – 4 May 1999 in Bangkok for 40 participants including different stakeholders from government, non-government and industries. The main objectives of the workshop are to strengthen capacity and capability as well as exchange experiences in management of PCDD/PCDF with the country.

### F u t u r e A c t i v i t i e s

PCD has planned to make the dioxins and furans inventory as completed as possible in the near future. At present, the problem has arisen since Thailand has no specific dioxins and furans laboratory. Laboratory for dioxins and furans is one of the most necessary facility to complete this project. Thailand with cooperation of GTZ and the Institute of Occupational Safety and Health in Germany, therefore has requested assistance from the Chlorine European Industry, EURO CHLOR and UNEP Chemicals, Geneva to absorb the expenses of the dioxins and furans sampling and analysis. Thailand also has planned to establish the specific dioxins and furans laboratory in Thailand to perform the long-term monitoring system. This laboratory could not only for dioxins and furans analysis in Thailand but also possible for countries in the region. More detail on laboratory establishing will be discussed later since it will involve both financial problem and personnel expenses.

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