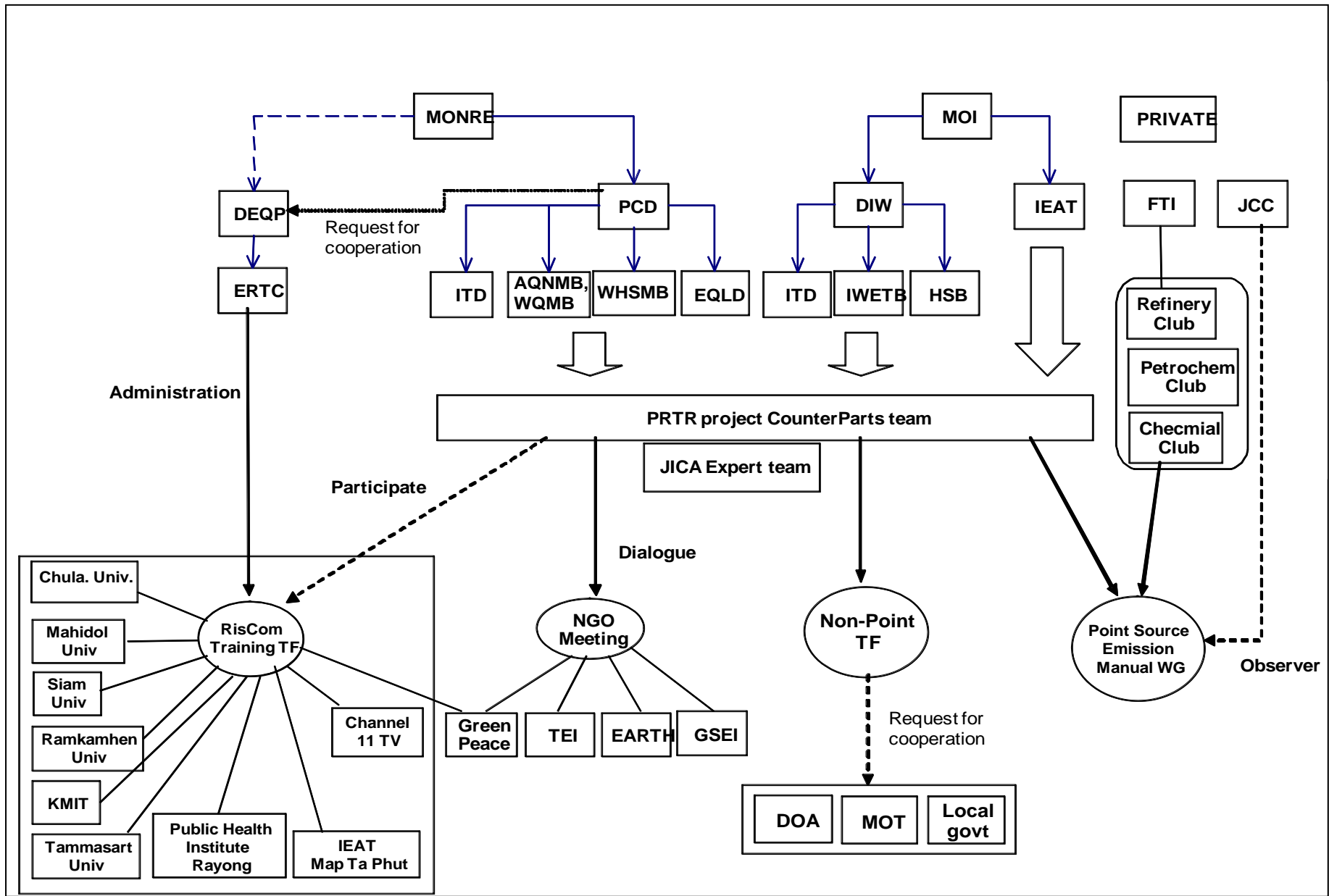


## Summary

Summary	<p>The project officially started March, 2011. Setting up of the organizational framework was the first step. With excellent cooperation between PCD, DIW and IEAT, the well balanced CP team from all relevant sections was set up. Promotion of stakeholder's involvement was also included in the framework by means of NGO dialogue meeting, joint preparation of emission estimation manual with private sectors. In the area of risk communication, agreement with ERTC/DEQP was made to jointly develop the training course.</p> <p>Overall progress of the first six months seems reasonable without any serious bottleneck.</p>
Activity	<ul style="list-style-type: none"> <li>● JCC (joint coordination meeting) were held on March 25<sup>th</sup>, 2011.</li> <li>● Inception report was prepared and submitted.</li> <li>● Organizational set up for the project was developed (refer to next page).</li> <li>● Agreement with ERTC/DEQP was made to develop risk communication training course at ERTC.</li> <li>● Agreement with FTI was made to develop emission estimation manual for specific industry.</li> <li>● 1<sup>st</sup> NGO meeting was organized on June 15<sup>th</sup>, 2011.</li> <li>● Press conference and 1<sup>st</sup> PRTR seminar was organized on June 28, 2011.</li> <li>● Capacity assessment sheet was developed and used to assess key CP staff.</li> <li>● JICA project web site was developed.</li> <li>● Study tour to Japan by both executive team and working team was prepared.</li> <li>● Progress report No. 1 is being prepared.</li> </ul>
Paper/report prepared	<ul style="list-style-type: none"> <li>● Inception report</li> <li>● Progress report No. 1</li> </ul>
Issues	No specific issue which may affect the overall project.
Plan	<ul style="list-style-type: none"> <li>● Study tour to Japan is scheduled in November 15 – 23, 2011.</li> <li>● Progress report No2 to be submitted at mid. of March 2012.</li> <li>● 2<sup>nd</sup> NGO meeting will be organized.</li> <li>● Involvement of local stakeholders at Rayong will be promoted to prepare pilot project.</li> </ul>



1.1. Output 1 Design of PRTR system	
Summary	<p>To design the PRTR system, priority of policy objectives was discussed with CPs. To obtain opinion from various stakeholders, the issue was discussed and questionnaire surveyed during the PRTR seminar on June 25<sup>th</sup>. Result indicated well balanced opinion among 1) to collect the scientific data for government, 2) to ensure people's right to know and 3) to promote voluntary reduction of emission by industry. All objectives obtained over 30% answer as priority objective.</p> <p>Also as the first step, target chemicals are being selected. Basic data survey was sub-contracted to Thailand Environmental Institute to collect import, export, production, utilization and storage data of all chemical present in the country. Over 3000 chemical information was collected. First priority list of chemicals was prepared taking its exposure amount and toxicity data into consideration.</p> <p>Database and web-site system for PRTR was considered. Various existing database system were reviewed. Strategy for coordinating the data was discussed and proposed.</p>
Activity	<ul style="list-style-type: none"> <li>● Policy objective was discussed and questionnaire surveyed in PRTR seminar.</li> <li>● Scope of chemical substance basic survey was discussed and TOR for sub-contract is developed.</li> <li>● Survey was sub-contracted to Thailand Environmental Institute and completed</li> <li>● Selection criteria for target chemicals was discussed and developed.</li> <li>● First priority list of chemicals was prepared.</li> <li>● Various data base systems in environmental field in Thailand were reviewed. Strategy for PRTR database is prepared.</li> <li>● TOR for web site development for sub-contract is prepared.</li> </ul>
Paper/report prepared	<ul style="list-style-type: none"> <li>● Policy objective questionnaire result summary</li> <li>● Report of chemical substance basic data survey</li> <li>● Selection criteria for target chemicals.</li> <li>● First priority list of target chemicals.</li> </ul>
Issues	<p>Various database related to chemical and pollutants exist and are not well coordinated. Sharing of information among the concerned agencies is an issue to be improved. Organizing a meeting with related IT staff is proposed.</p>
Plan	<ul style="list-style-type: none"> <li>● The policy objective of PRTR system will be further discussed.</li> <li>● The selection of target chemicals will be finalized.</li> <li>● The sub-contract for PRTR web site development will be completed. Basic system will be ready by February 2012.</li> </ul>

1.2. Output 2 Reporting system from Industry	
Summary	Existing reporting system was reviewed to avoid any overlap. DIW is implementing reporting system of conventional pollutant nationwide. Over 2000 factories are under this reporting requirement. Preliminary factory survey in Rayong, both using existing data and field visit was started.
Activity	<ul style="list-style-type: none"> <li>● Review of existing reporting system.</li> <li>● Preliminary factory survey.</li> </ul>
Paper/report prepared	None.
Issues	None.
Plan	Following initial selection of target chemicals, selection of target business and type will be preceded.

3.3 Output 3 Estimation from Point Source	
Summary	<p>Following the CP meeting on June 5<sup>th</sup> and introduction on Japanese practice on definition of point source and emission estimation, practical work for point source definition and preparation of emission estimation started.</p> <p>Concept note for point source definition including target business selection was developed with detail discussion between expert and CPs. Data of chemical utilization as well as factory basic data were collected to prepare for point source definition. Data of chemical utilization (2004 from DIW) was sorted for size, type of business and chemicals. Factory data from Rayong, pilot project site, was also compiled for size and type of business.</p> <p>In collaboration with FTI, working group meeting was held in June 23<sup>rd</sup> to develop emission estimation manual for chemical sector (chemical, petrochemical. refinery). Later the group was divided into two as chemical/petrochemical and refinery. Meeting was held in Sept. 9<sup>th</sup> with refinery group to discuss the outline of emission estimation manual.</p>
Activity	<ul style="list-style-type: none"> <li>● Introduction of Japanese practice of point source definition and emission estimation.</li> <li>● Discussion and preparation of concept note of point source definition and emission estimation methodology.</li> <li>● Data review and compilation of chemical utilization and Rayong factory.</li> <li>● Two meetings organized with FTI collaboration for preparing emission estimation manuals.</li> </ul>
Paper/report prepared	<ul style="list-style-type: none"> <li>➤ Concept Note for point source definition</li> <li>➤ Emission estimation manual for chemical industry (translated from Japanese Chemical Industry Association) as reference</li> <li>➤ Emission estimation manual for refinery (translated from Japanese Petroleum Federation) as reference.</li> </ul>

Issues	As target chemicals and business are still in the process of selection, working group for industrial sectors other than chemical industry could not be set up. The group will be set once the chemicals and business selection is completed.
Plan	<ul style="list-style-type: none"> <li>● Point source definition will be finalized.</li> <li>● Draft emission estimation manuals for chemical/petrochemical and refinery will be prepared.</li> <li>● New working groups for other industrial sectors will be set up (2- 3 sectors)</li> </ul>

3.4 Output 4 Estimation from Non Point Source	
Summary	Target business for non point source was considered. Four business categories were selected for the work of initial period. Then basic information related to emission factor and activity statistics were being collected.
Activity	<ul style="list-style-type: none"> <li>● CP meetings were held to explain point and non-point source definition in Japanese example. Work plan for non point source estimation was prepared and discussed.</li> <li>● Task force members were selected to work on non point source estimation.</li> <li>● Basic technical explanation for emission estimation with Japanese example and TOR for Task force members were prepared to cover “Small business”, “Non target business (agriculture, construction, etc.)”, “Household” and “Mobile”. Activity for small business would be postponed till point source definition is completed.</li> <li>● Substantial effort is underway by PCD automobile laboratory to experiment emission factors by itself. Technical advice to reduce background in automobile laboratory was provided by JICA expert.</li> <li>● Negotiation with Thailand Automotive Institute and ERTC was started to share emission factor data on evaporative gas.</li> <li>● Training of emission estimation methodology for paint and agricultural chemical was provided to CPs.</li> <li>● Visit to DOA was done to collect statistical data required for emission estimation.</li> </ul>
Paper/report prepared	<ul style="list-style-type: none"> <li>● Basic estimation method for non-point source in Japan(Translated)</li> </ul>
Issues	<ul style="list-style-type: none"> <li>● Responsibility if DIW or PCD to handle small business shall be discussed considering availability of data for each department.</li> <li>● Number of experiment in AEL and PCD laboratory for emission factor of used automobile may not be sufficient.</li> </ul>
Plan	<ul style="list-style-type: none"> <li>● Data collection of pesticide import and production.</li> <li>● Request shall be made for cooperation to Thai Automotive Industry Association, Thai Paint Industry Association, Pesticide association, etc..</li> </ul>

	<ul style="list-style-type: none"> <li>● Data collection related to paint.</li> <li>● Site survey of factory in pilot area</li> <li>● Compilation and review of existing emission factor</li> <li>● Advice to AEL for background problem.</li> </ul>
--	--

3.5 Output 5 Utilization of PRTR data	
Summary	There was no specific activity related to Output 5 during the period.

3.6 Output 6 Risk Communication	
Summary	To develop human resources for adequate risk communication of chemical substances in Thailand, implementation of a training program for risk communication is set as a goal for this year. For this purpose, a Task Force to develop training program of risk communication was established by Thai specialists in toxicology, exposure assessment, risk assessment and risk communication. The specialists were invited from government (including CP of PRTR project), University, NGO, Industry and local community.
Activity	<ul style="list-style-type: none"> <li>● Introductory lecture for general outline of risk communication as well as situation in Japan was delivered in CP meeting on June 6, 2011</li> <li>● Task Force for developing training program for risk communication was set. One preliminary meeting and one official meeting were organized in June, 2011.</li> <li>● Questionnaire survey for task force members about content of training program.</li> <li>● Presentation for general outline of risk communication as well as situation in Japan was delivered in PRTR seminar on June 28, 2011.</li> </ul>
Paper/report prepared	<ul style="list-style-type: none"> <li>● Conceptual curriculum for risk communication training program.</li> </ul>
Issues	<ul style="list-style-type: none"> <li>● Information related to research on chemical risk in higher educational institute as well as literacy about risk in Thailand shall be further collected. Current status of communication between industry and local community also shall be further collected.</li> <li>● Sharing understanding of issues related to risk communication among task force member is required.</li> </ul>
Plan	<ul style="list-style-type: none"> <li>● Training program and curriculum will be developed and the course to be implemented at ERTC on continued basis.</li> </ul>