

Report from 10th Regional Chemicals Management Forum



March 7-9, 2016
Bangkok, Thailand

I. Opening and Welcome

The 10th Regional Chemicals Management Forum was held at Avani Atrium Hotel, in Bangkok, Thailand, jointly organized by the Swedish Chemicals Agency (KEMI) and Thai Food and Drug Administration (Thai FDA).

The main objective of the 10th Regional Chemicals Management Forum was to continue the building of a regional meeting place for development cooperation, training and networking in chemicals management. Furthermore the 10th Regional Forum aimed to introduce participants to a specific chemicals management issue, namely Chemicals in Products, challenges and approaches.

The 10th Regional Forum was presided by **Mr. Chapon Rattanapan**– Director of Policy and Technical Planning Division on behalf of Thai FDA Director General and **Ms. Anne-Charlotte Malm**, Head of Development Cooperation Section, Embassy of Sweden in Bangkok. The meeting was opened at 9.00 a.m. on 7 March 2016, with welcome remarks by Mr. Chapon Rattanapan and Ms. Anne-Charlotte Malm.

On behalf of Thai FDA, **Mr. Chapon Rattanapan** extended his warm welcome to participants from Sweden, Bhutan, Cambodia, Laos, Myanmar, Thailand, Vietnam, People's Republic of China to attend the 10th Regional Chemicals Management Forum. He also expressed sincere appreciation to KEMI, the Government of Sweden and all participating countries for their continuous support to move forwards the initiative of Regional Chemicals Management Forum. This initiative has significantly contributed to better understanding and regional cooperation concerning chemicals management and particular issues, such agricultural chemicals, waste management and chemicals in products. WHO reviews in 2004 showed that 25 percent of global burden of diseases was related to environmental factors, including chemicals. WHO estimated that 4.9 million deaths and 86 million disability-adjusted life years were attributable to exposure to selected chemicals. Therefore he emphasized the importance of chemicals management and considered the 10th Regional Forum as a platform for further strengthening the cooperation among countries in the region towards the development of sound and advanced chemical management, particularly chemicals in products.

On behalf of the Government of Sweden, **Ms. Anne-Charlotte Malm** extended her appreciation to Thai FDA for hosting the 10th Regional Forum, KEMI for co-hosting and arrangement to share Swedish experience in chemicals management and governance. She also thanked all participating government agencies, international organizations and companies for sharing their experiences via presentation and dialogue throughout the three days. She mentioned about continuous support of Swedish government towards countries in the region under the project called "Towards a non-toxic environment in South East Asia". The project has facilitated regional exchange of knowledge, experience and dialogue on chemicals management and specific issues, and promoted regional agreement upon joint strategies how to move forwards in a proper direction. At present, many things can threaten our fundamental right to life and health---hazardous chemicals are among these threats. Hazardous chemicals in products can pose serious

threats to workers during the production, to people living in the vicinity of factories affected by pollution, and to consumers who use such products. The potential harms of hazardous chemicals in products highlight the importance of sound chemicals management, including information dissemination and awareness raising, to be one of the key issues for sustainable development. In 2015, 193 Heads of States agreed on and adopted the 2030 Agenda for Sustainable Development. The Agenda has 17 Sustainable Development Goals (SDGs) and a number of sub-goals. The Sustainable Development Goal relevant to Chemical Management is SDG 12 on “Ensure sustainable consumption and production patterns”. SDG 12 has target 12.4 that requires, by 2020, to achieve the environmentally sound management of chemicals and all waste throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil, in order to minimize their adverse impact on human health and the environment. This is re-confirmed by the 2020 goals formulated by the global policy framework to international chemicals management known as SAICM. Last but not least, the drive of ASEAN to have more regional integration, such as ASEAN Economic Community (AEC), will also stimulate ASEAN countries to do more cooperation, e.g. increased harmonization of regulations, joint enforcement activities, and identification of areas for special attention in the area of chemicals management.

II. Attendance

Seventy-four participants attended the 10th Regional Chemicals Management Forum. They represented concerned government agencies of the following countries, namely Sweden, Bhutan, Cambodia, Laos, Myanmar, Thailand, Vietnam, and People Republic of China. The 10th Forum also welcomed the experts from UNEP and concerned business entities. See detailed list of participants in Annex 2.

III. Background and legislative framework

1. Introduction to Chemicals in Products

Ms Jenny Rönngren, International Unit, KEMI, introduced the special issue of Chemicals in Products –about potential hazards, gaps and challenges, as well as what we can do to improve management. In our daily life, people are surrounded by products and chemicals, ranging from chemicals in toys, furniture, clothes, food containers, household products and so on. Sometimes chemicals are produced in one country, and used in another country, and then waste is treated in another country. In 2012, UNEP reported, in Global Chemicals Outlook - Towards Sound Management of Chemicals, that there was increased extraction of resources and production of chemicals over time, China was the biggest chemical producer in 2010. Chemicals in products are very complicated. For example, in an ordinary chair, there are many chemicals in various parts, such as paint and varnish in wood, chemical additives in plastic, chromium surface coating in metal, residues of blowing agents (CFC) in foam plastic, flame retardants in textile and chemical additives in rubber. Exposure to these chemicals can occur during production, usage, recycle and waste

management. Chemicals of special concerns are carcinogens, mutagens and reproductive toxicants. But the problem is we still lack information on Chemicals in Products---we do not exactly know about their effects to health and environment, and we do not know the cocktail effects of these chemicals. Moreover, there are gaps in information exchange, as information gets lost during the way from chemical manufacturers, formulators/ material manufacturers, component manufactures, and brand owners. Hazardous chemicals are found where they should not be, for example, Brominated flame retardants in thermo cups and kitchen utensils, Lead in solders in electric products, Phthalates in toys, and Perflourinated substances in drinking water. To address these challenges, we need to improve knowledge and information exchange.

2. Addressing chemicals in products in the region

Ms. Sumei Li, Basel Convention Regional Centre, Beijing, China, presented the result of comparative study on Polybrominated diphenyl ethers (PBDEs) in Electrical and Electronic Equipment (EEE) and related Wastes (WEEE) in selected ASIAN and Pacific Countries. PBDEs have been used as additive flame retardants in a variety of consumer products and articles, e.g. EEE, textiles, and toys. Due to their intrinsic properties; resistance to degradation and high lipid solubility leading to concerned bioaccumulation in fatty tissues, semi-volatility causing long distance movement in the atmosphere, PBDEs are persistent organic pollutants (POPs) restricted under Stockholm Convention. The situations of PBDEs in Asian and the Pacific countries vary according to different economical developing levels, booming in consumption of EEE containing PBDEs, and different levels of PBDE waste management. China, Cambodia, Mongolia, Pakistan and Sri Lanka were involved in the comparative study. The aspects under study included production and use, import and export of PBDEs and EEE containing PBDEs, regulations on EEE and E-waste containing PBDEs, and treatment technology of E-waste. The challenges of countries in the region concerning PBDEs in EEE and related wastes (WEEE) are insufficient legislative framework, unavailability of an efficient nation-wide collection system, lack of controlling measures and technology, difficulty in implementing Extended Producer Responsibility (EPR), inadequate awareness of the public, and lack of suitable substitutes for PBDEs. Recommendations for the improvement of PBDEs management in the region include formulation of legislation for preventing the release of PBDE into the environment, building more efficient national wide collection system, strengthening formal sector and facilitating technology transfer for dismantling and recycling EEE containing PBDEs. Furthermore the implementation of EPR, capacity building and awareness raising on PBDEs and their potential impacts on health and the environment, as well as research on environmental friendly substitutes should be promoted.

3. EU legislation on Chemicals in products

Ms Karin Rumar, Enforcement and Registries Department, KEMI, informed about EU Legislation on Chemicals in Products. Related EU legislation can be categorized into 2 types; 1. General legislation, such as CLP, REACH, and Product Safety, and 2. Product legislation related to a wide variety of products such as detergents, cosmetics, RoHS/WEEE, POPs, toys, plant protection products, and biocidal products. Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) has 5 principles; shifting burden of proof towards industry, duty of care, no data equals no market, building up a strong European Chemicals Agency (ECHA), special attention to SMEs. Concerning the EU definitions under REACH, “Products” mean chemical substances or mixtures as functioning contents, whereas “Articles” are chemicals in products, not active ingredients. In Annex XVII, there are restricted substances of 63 entries. For example, concerning Phthalates entry 51 and 52, REACH requires that toys and childcare articles containing these phthalates in a concentration higher than 0.1 percent by mass of the plasticized material, and which can be placed in the mouth by children shall not be placed on the EU market. Under Toys safety directive (2009/48/EC), restricted chemicals in products are 20 metals, mainly heavy metals, 20 phthalates and allergenic fragrances. RoHS directive restricts the use of hazardous substances in electrical and electronic equipment--- the restricted substances are Cadmium 0.01%, Mercury, Lead, Hexavalent Chromium, Flame retardants PBB and PBDE, Phthalates; DEHP, DBP, BBP, and DIBP.

4. SAICM Chemicals in Products Programme (CiP)

Ms Anna Fransson, International Unit, KEMI, presented about the information on chemicals in products. The major challenge is lack of chemical information throughout product life cycle. In order to reduce the possible risk of chemicals, we need to have greater access to information of the contents of substances in products, greater knowledge of flows, risks and management of chemicals in products and increased possibilities of substitution of hazardous substances in products. Due to global markets and life-cycles of products, global cooperative actions concerning chemicals in products are needed and also recognized as an emerging policy issue under Strategic Approach to International Chemicals Management (SAICM). Chemicals in Products (CiP) Programme has been developed under SAICM. The CiP programme has the main principle that all stakeholders, both within and outside the supply chain, should have access to relevant and reliable information to make informed decision about chemicals in products. The CiP programme will be of benefit to industry, governments, and NGOs. Four Prioritized product groups under the programme are textiles, electronics, construction materials and toys. Concerned industries are encouraged to join the CiP Programme, by contacting UNEP at cipprogramme@unep.org.

IV. Enforcement

5. Enforcement of legislation on Chemicals in Products

Ms Karin Rumar, Enforcement and Registries Department, KEMI, presented about Enforcement of legislation on Chemicals in Products. Enforcement is an essential part of chemical control. Legal responsibilities of enterprises should be clear —“No Law equals No Enforcement”. Inspectors must have legal rights to get information, do site visits, and issue orders. Authorities can also impose sanctions in case of violation of law. Education for authorities can be both external, i.e. courses and seminars at universities, and internal, e.g. guidance for inspectors, mentorship, legal training, and learning by doing. Swedish approach for chemicals control cover three domains. The first domain is “Inside” – inherent properties, having KEMI as competent authority. The second domain is “Outside” –waste, and air/water/soil quality, governed by Swedish Environmental Protection Agency. The third domain is “Workside” – workers protection, controlled by Swedish Work Environment Authority. Chemicals control in Sweden is decentralized, from central level (such as KEMI), to regional level (regional work inspectorates, county administrations) and local level (local municipalities). Degrees of control among products vary from high control (Pesticides), moderate control (Chemical products) and low control (chemicals in products). Concerning chemicals in products, the enforcement focuses on EEE, toys, sport and leisure, construction articles, interior design products, clothes, shoes, and accessories. Enforcement requires analyses using XRF for screening, and sending to an external accredited laboratory. In case of toys and EEE, it is also required by law to have documentation such as DoC–EU Declaration of Conformity, CE marking and company information label, and sometimes technical documentation. The result of enforcement activities during 2008-2013 indicated that over 10 percent of toys and other childcare articles, as well as electronics, did not meet the requirement. Moreover an enforcement project on toys, was conducted in 2015, having focus on electronic toys, soft plastic and packaging PVC. 17 out of 112 toys failed, since they contained restricted substances, such as lead, cadmium, phthalates, and SCCP. Network for enforcement is supportive, particularly among Nordic countries, ECHA forum, and RAPEX (Rapid alert system) funded by EU Commission.

After the presentation, Ms Karin Rumar invited all participants to do exercises with product samples, encouraging participants to interactively find out what’s wrong with the products and hazardous chemicals inside.

V. Group Discussion concerning Chemicals in Products

6. All participating countries had their group discussion about existing regulation, enforcement capacity, public concerns and the next steps concerning chemicals in products. Several countries mentioned in their presentation that they need to improve their legislation, strengthen the enforcement, and work on action plan concerning chemicals in products. They also called for cooperative training and development of database and information exchange network on CiP.

7. **Mr Ule Johansson, KEMI's representative**, informed the Forum about the book called "The Bigger Picture: Assessing Economic Aspects of Chemicals Substitution". The Bigger Picture is developed by **chemsec**, international chemical secretariat, an international NGO. The publication shows that a number of companies have worked hard to use safer chemicals and receive economic benefits from such substitution. At the beginning, using new alternatives are quite costly, but tend to reduce as supply increases. Use of hazardous chemicals can be costly, due to additional costs for protective measures and healthcare. There is a growing demand for safer products among consumers.

VI. Examples from Industry

8. Chemicals Management at H&M

Ms Sheila Shek, Environmental Supply Chain Responsible, H&M, presented H&M experience concerning chemicals management. H&M has production sites in a number of countries, e.g. Sweden, Turkey, Romania, Bulgaria, Bangladesh, India, Indonesia, China, Korea and Ethiopia. H&M markets fashion and quality clothing worldwide. With the vision of ensuring safe products made in a healthy workplace while protecting the environment, H&M developed the roadmap to drive towards elimination of hazardous chemicals by 2020. By applying the precautionary principle, H&M began chemical restrictions in 1995 by setting restricted substance lists for various product groups, based on the strictest legislation in selling countries. H&M actions focus on engagement and communication with all stakeholders; staff, chemical suppliers, brands and government. Recent successful case is Perfluorinated Chemicals (PFC) phase out. The initiative started in 2009 having cooperation with chemical suppliers to find out PFC alternative chemicals, "Bionic Finish" a fluorocarbon-free water repellent, for functional outerwear. Afterwards H&M has totally banned PFC use in all products since 2013. Challenges in chemicals management include changing mindsets of stakeholders, business concern, technology availability, cost, competence, readiness level and legislative gap.

9. Chemicals Management at Beiersdorf

Ms Wimolsiri Punjatanasak, Head of Regulatory Affair of Southeast Asia, Beiersdorf, informed the Forum about chemicals management in Beiersdorf. As an inventor of modern skin care products, with over 130 years of experience in R&D, Beiersdorf has a policy for global sourcing of raw materials. All raw materials have to pass through a multi-stage selection process, starting from phase-in, to supplier development and even phase-out in

case of having potential risks. During phase-in, experts search for raw materials based on cosmetics regulation, consumer health, skin compatibility, and sustainability, then conduct assessment of new and alternative raw material. Beiersdorf regularly evaluates suppliers and requests that all update/changes of raw materials must be informed. Furthermore Beiersdorf has good control of material master data, utilizes third party manufacture management, and cooperates with government agencies (such as Australian TGA, Health Canada, Thai FDA for GMP audit) and regional bodies (such as ASEAN Cosmetics Committee to update with the latest regional regulation). Beiersdorf always responds to consumer concerns by setting up Hot line and e-mail for all complaints and keeping these inputs in the company database.

VII. Other projects/activities

10. Chemical management at Tesco Lotus

Mr Anop Bundit, Energy Compliance and Awareness manager, Tesco Lotus, presented about the experience of Tesco Lotus at Bangphra, Chonburi province, to implement Carbon Roadmap Project. The project target is to reduce Carbon Dioxide emission for being Zero carbon store. Several measures have been taken, for example improvement of refrigeration system, air conditioning system, electrical system, making skylight, using renewable energy, and using green items, e.g. biogas, wind turbine, natural light, and porous concrete, double airlock entrance and rain water reservation pond. He also demonstrated about benefit, financial analysis (investment, annual saving, payback period) of each measure taken.

11. CiP Textile Project

Ms Ling Xi, Foreign Economic Cooperation Office (FECO), Ministry of Environmental Protection (MEP), China, introduced about CiP Textile Project, the first CiP project in China, funded by GEF during 2015-2017. The project objective is to identify and demonstrate practices facilitating access to information of chemicals contained in textile products and to promote sound chemicals management in textile sector in China. Activities under the project include baseline assessment & initial guidance, identifying the best practices, pilot & testing best practices, and having lessons learned & evaluation. Stakeholders, within and outside the supply chain, including their roles and responsibilities, have been identified. Several meetings were organized, e.g. project inception workshop, expert group meeting and partner's discussion meeting. FECO arranged an exploratory visit to Ningbo in Zhejiang province and Guangzhou in Fujian province involving 21 companies and 1 textile garments commerce chamber, and most of these companies agreed to actively take part in the project. It is envisaged that Chemicals information Exchange (CiE) would be developed in order to improve chemicals management and performance in these textile companies.

11. CiP Toys Project

Ms Ying Wang, Foreign Economic Cooperation Office (FECO), Ministry of Environmental Protection (MEP), China, presented about CiP Toys Project. China is the biggest producer of toys, 70 percent of toys on this planet made in China, with 61 percent produced in Guangdong province. These toys are exported worldwide; for example to US and Canada (40 %), EU (29%) and Japan. Toys industry is highly regulated by EU, US and China. Related legislations in China include China Compulsory Certificate, Toy Safety Standards, Measures for Inspection and Supervision of Import and Export Toys, and Provision on Recall of children toys. In CiP Toys project, there are 4 components. First component is identification of specific chemicals and categories of toy products of highly concerned, e.g. PBDEs in electronic toys, SCCP in plastic toys, lead and aromatic amine in bite toys, and methanol in wood toys. Second component is identification of guidance (voluntary approach) for toy sector to perform clean production. Third component is knowledge sharing, together with capacity building and case study of 1-2 big and famous toy enterprises. The last component is monitoring and evaluation.

12. Example of Collaboration with Industry

Ms. Anna Fransson, International Unit, KEMI, presented about experiences of collaboration with industry and emphasized the importance of a proactive approach to move forwards Chemicals in Products management. Sweden has implemented an action plan for a toxic-free everyday environment since 2011, in order to reduce the risk faced by people in their everyday lives of being exposed to hazardous chemicals, with special attention on children and adolescents. KEMI has initiated dialogues with companies in 3 priority sectors; toys, textile, and cosmetics. Dialogues with industry means that Kemi and related agencies work together with companies to reduce children exposure to hazardous substances. Measurable goals concerning substitution/ reduction of hazardous substances have been set up by participating companies in each industry dialogue. KEMI has technically supported these companies in the process of replacing/reducing hazardous chemicals in products. Having industry dialogue is considered a cost effective approach and an important complement to the legislation.

VIII. Group Discussion concerning Industry

13. All participating countries discussed interaction between government agencies and industries, its importance, using 2 approaches; voluntary measures and regulation, challenges when working with these approaches at the same time. Most countries recognized the importance of interaction with industries, having their comments and views during drafting regulation. Some countries utilized voluntary measures and regulation at the same time, but with different objectives. They considered these two approaches might result in a synergy. Voluntary measures were very welcome by business; making implementation process get quicker. However some countries mentioned that using these approaches together were not possible, since this might cause confusion among business

entities and result in non-compliance. Most countries mentioned about the challenges of having limited resources, skilled personnel, and laboratory facilities when using regulation.

IX. Presentations of Country Situations

Representatives of participating countries in Greater Mekong Subregion (GMS) and Bhutan presented about the latest development of chemicals management since the 9th Forum, planned activities in 2016 and ideas for the regional cooperation, that can be summarized as follows:

1. Thailand situation

Thailand has implemented the 4th National Strategic Plan on Chemicals Management (2012 -2021) with the goal that within 2021 the social and environment is safe by effective management of chemicals in accordance with national development and participation from all sector. In 2015, Thai FDA developed Thailand Existing Chemicals Inventory (TECI) of Single Substances (about 7300 substances imported and produced in Thailand, used raw data of the year 2012 from Customs Department and Department of Industrial Works). Since October 2012, Thailand has already enforced Regulation of Science and Technology Professionals Council on the control of Science and Technology Professionals. The regulation requires that in every production, control and management of hazardous chemicals, there must be a responsible person having a relevant license of Science and Technology Professionals. With regard to the administration of the 4th National Strategic Plan on Chemicals Management, Thailand finished the evaluation of the first phase action plan (2012-2015), and developed the second phase action plan (2016-2018). Recently the National Committee on Strategy Development for Chemicals Management, chaired by Deputy Prime Minister, approved the second phase action plan to be implemented during 2016-2018. Issues of interest for regional cooperation are chemicals management experience sharing, CiP, and technology transfer of best practices from Sweden and European countries.

2. Vietnam situation

In 2015, Ministry of Industry and Trade (MOIT) revised and developed a number of legal documents on chemicals management, e.g. Decree on the administrative penalty for chemicals, fertilizers and explosives. Furthermore MOIT updated several master plans, particularly a plan for restructuring Vietnam National Chemical Group (Vinachem) and strategies for the development of Vinachem to 2020. MOIT also carried out international cooperation activities related to Minamata Convention on Mercury, CBRN, REACH, GHS, RoHS and Rotterdam Convention. In 2015, Ministry of Agriculture and Rural Development (MARD) issued circular on the management of Plant Protection Products and developed guideline and toolkit on Pesticide Registration. Plan for 2016 includes revision of several circulars, e.g. circular on classification and labelling of chemicals based on GHS, implementation of relevant master plans, preparation of National Implementation Plan for

Minamata Convention on Mercury for ratification, capacity building on risk assessment of plant protection products. Issues of interest for regional cooperation cover legal and institutional framework development, enforcement and inspection, transboundary and international concerns about chemicals management.

3. Lao PDR situation

The latest development of chemical management is about drafting Chemical Law of Lao PDR having 9 chapters, 79 articles. The Chemical Law is intended to register chemicals of 4 categories for chemicals management throughout the life cycles, from import/export, manufacturing, handling, transport, storage, usage of chemicals, to wastes disposal, as well as coping with chemicals accidents. Ministry of Industry and Commerce (MOIC) submitted the draft Chemical Law to Ministry of Justice (MOJ) and Prime Minister Office (PMO) and got their approval in mid 2015. Later MOIC submitted the draft Chemical Law to Laos National Assembly (LNA) in December 2015 and had a consultation workshop and concerned agencies in February 2016; getting the final draft Chemical Law. It is anticipated that the final draft Chemical Law will be presented to the LNA annual meeting in December 2016. Furthermore, during 2016-2017, MOIC will propose to the government for establishing an agency or department of Chemicals Management, and formulating a strategy and action plan to move forwards chemicals management in Lao PDR. Challenges faced at present are having no specific agency on chemicals management in MOIC, low priority of sound chemicals management in the national development agenda, insufficient information, limited number of skilled/experienced staff and laboratory facilities for chemicals management. Lao PDR needs trainings for regulatory authorities and private sectors and strongly supports regional cooperation and networking on chemicals management.

4. Myanmar situation

Ministry of Industry (MOI), is responsible for promulgating the order/ notification for chemical safety management. Ministry of Science and Technology (MOST) coordinates with related ministries for Chemical, Biological, Radiological and Nuclear defense (CBRN), Chemical Weapons Convention (CWC), and Biological Weapons Convention (BWC). In early 2016, CBRN National Action Plan was drafted. Myanmar already ratified CWC in 2015 and BWC in 2014. Ministry of Health, by FDA, is a major regulator for controlling food, drug, cosmetic and medical device. FDA analytical laboratories carry out chemical tests; detecting unpermitted and harmful chemicals in foods, drugs, and cosmetics and publishing notifications in government newspapers. Ministry of Energy (MOE) has a project with Norwegian Environment Agency to better the management of hazardous and chemical waste. Ministry of Agriculture and Irrigation (MOAI) has plant protection project concerning pesticide residues and heavy metal analysis in soil. Myanmar needs trainings, research, technical support and monitoring program for toxic and hazardous chemicals management.

5. Cambodia situation

Cambodia does not have a specific law for chemicals management as the whole. But the environmental law and relevant sub-decrees can be used for managing chemical wastes and hazardous substances. Recent developments of law related to chemicals management include Sub-decree on E-Waste Management (to prevent importation and illegal dumping), Sub-decree on Garbage and Household Waste Management, and Prakas on Procedure for the Primary Inspection and the Validity for Pesticide Distribution. In addition, Cambodia has recently updated the national implementation plan on POPs, the inventory report of POPs and the assessment report on the impact of POPs. A number of trainings have been conducted, for example training for pesticide and fertilizer retailers and wholesalers, and training concerning E-waste management and the impact. Many activities on chemical management are planned for 2016, for example development of a regulation on plastic bag use, the national initial assessment report for ratifying Minamata Convention on Mercury, and updating national executing proposal for PRTR implementation. With regard to regional collaboration, more participating countries, e.g. Philippines, Bhutan, Japan and China, should be invited to be part of the regional collaboration. Issues of interest for regional cooperation are policy and regulation on chemicals management, information sharing system related to CiP and agricultural chemicals, trade of chemicals of high concern, discussion forum and regional website development.

6. Bhutan situation

Bhutan is a country of small population, but having high bio-diversity concentration. Bhutan takes conservation measures seriously. Bhutan has an independent authority called "National Environment Commission". The agency is a decision making body on all matters concerning the environment in the country, and acts as the focal point for most multilateral environmental agreements, e.g. UNFCCC, UNCBD, Basel, Rotterdam and Stockholm Conventions. Regulatory mechanisms by concern ministries include Waste Prevention and Management Act, National Environment Protection act, Environment Assessment Act, Environment Discharge Standards, Pesticide Act, Medicine Act, Narcotic Drugs, Psychotropic Substances and Substances Abuse Act, and Regulation on Ozone Depleting Substances. Many challenges to chemicals management are as follows: inadequate policy and rules, lack of knowledge and technical expertise on chemicals management, poor coordination amongst relevant agencies, lack of awareness on chemical risks, poor database on chemicals, absence of proper waste treatment plants and disposal facilities. As a way forwards, Bhutan will develop strategy and action plans, e.g. conducting a comprehensive assessment of overall existing chemicals management system, development of an integrated national chemical database, and capacity building for implementation of sound chemical management system.

X. Group Discussion concerning the way forward

All participating countries had their group discussion about prioritized topics for the future Forum, development of the Forum website and utilization of social media to improve regional cooperation on chemicals management. Prioritized topics proposed include risk assessment, laboratory capacity building for pesticides and CiP analysis, chemical waste management, exchange on policy and regulatory information, and regional harmonization for chemicals management. All participating countries agreed that the Forum website should be established, and contain summary reports of the Forums, chemical legislations of participating countries, and examples of best practice on chemical and waste management. In addition, they all agreed that the use of several types of social media, e.g. web board, webinar, e-mail forum, and Facebook, could be beneficial for the regional collaboration on chemicals management.

XI. Closing

Ms. **Jenny Rönngren**, KEMI's representative, expressed her appreciation to Thai FDA and organizing team for making this event happen. She also gave special thanks to participating delegations for spending their valuable time participating in this forum and sharing their valuable experiences concerning chemicals in products and chemicals management. She also noted that the forum provided very useful results and thought-provoking proposals for future regional collaboration in chemicals management, adding that KEMI would continue supporting for this forum and related regional activities.

Speaking on behalf of Thai FDA, **Ms Amornrat Leenanithikul** –Head of Chemical Safety group, thanked Swedish Chemicals Agency (KEMI) for supporting this Forum, and all experts from Sweden, China, and companies for sharing their knowledge, experience and good practices on Chemicals in Products. She expressed thanks to all delegates from participating countries for their contribution to the Forum and also their active participation in discussions.

The 10th Regional Chemicals Management Forum ended at 3.30 p.m. of 9 March 2016.

Annex 1: Agenda

Day 1 – Monday, March 7		
Time	Activity	Responsible
Registration and opening Moderator: Ms Jenny Rönngren, Swedish Chemicals Agency		
8.30–9.00	Registration	
9.00–9.15	Welcome remarks by Sweden	Ms Anne-Charlotte Malm, Head of Development Cooperation Section. Embassy of Sweden, Bangkok
9.15–9.30	Welcome remarks by host country	Mr Chapon Rattanapan Director of Technical and Policy Division, Food and Drug Administration, Thailand
Part 1: Background and legislative framework Moderator: Dr Chaiporn Pumkum, Food and Drug Administration, Thailand		
9.30–9.50	Introduction to chemicals in products	Ms Jenny Rönngren, International Unit, Swedish Chemicals Agency
9.50–10.30	Addressing chemicals in products in the region	Dr (Ms) Sumei Li, Basel Convention Regional Centre, Beijing, China
10.30–11.00	Coffee/tea	
11.00–11.45	EU legislation on chemicals in products	Ms Karin Rumar, Enforcement and Registries, Department, Swedish Chemicals Agency
11.45–12.30	SAICM Chemicals in Products Programme, CiP	Ms Anna Fransson, International Unit, Swedish Chemicals Agency
12.30–13.30	Lunch	
Part 2: Enforcement Moderator: Mr Ule Johansson, Swedish Chemicals Agency		
13.30–14.30	Enforcement of legislation on chemicals in products	Ms Karin Rumar, Enforcement and Registries Department, Swedish Chemicals Agency
14.30–15.30	Group discussions	All
15.30–16.00	Coffee/tea	
16.00–17.00	Reporting back from group discussions	All
18.30–20.30	Welcome dinner, Avani Atrium Bangkok	

Day 2 – Tuesday, March 8		
Time	Activity	Responsible
8.30–8.45	Short summary of day 1	Mr Ule Johansson, International Unit, Swedish Chemicals Agency
Part 3: Examples from industry Moderator: Dr Chaiporn Pumkum, Food and Drug Administration, Thailand		
8.45–9.45	Chemicals management at H&M	Ms Sheila Shek, Environmental Supply chain responsible, H&M
9.45–10.45	Chemicals management at Beiersdorf	Ms Wimolsiri Punjatanasak, Head of Regulatory Affairs of Southeast Asia, Beiersdorf

10.45-11.15	Coffee/tea break	
11.15-12.00	Chemicals management at Tesco Lotus	Mr Anop Bundit, Energy Compliance and Awareness manager, Tesco Lotus
Part 4: Other projects/activities		
Moderator: Dr Chaiporn Pumkum, Food and Drug Administration, Thailand		
12.00-12.45	GEF project on textiles	Ms Ling Xi, Ministry of Environment, China
12.45-13.45	Lunch	
13.45-14.15	Examples of collaboration with industry	Ms Anna Fransson, International Unit, Swedish Chemicals Agency
14.15-15.15	Group discussion	All
15.15-15.45	Coffee/tea break	
15.45-16.45	Reporting back from group discussion	All
16.45-17.00	Closing remarks from host country and Sweden	FDA, Thailand and Swedish Chemicals Agency

Day 3 – Wednesday, March 9		
Time	Activity	
Presentations of country situations		
Moderator: Ms Pitchaya Saksripanit, Food and Drug Administration, Thailand		
8.30-9.00	Country presentation, Thailand	Dr (Ms) Yuwaree Inna, Independent consultant
9.00-9.30	Country presentation, Vietnam	Vietnam
9.30-10.00	Country presentation, Lao PDR	Lao PDR
10.00-10.30	Country presentation, Myanmar	Myanmar
10.30-11.00	Coffee/tea break	
11.00-11.30	Country presentation, Cambodia	Cambodia
11.30-12.00	Chemicals management in Bhutan	Mr Thinley Dorji, National Environment Commission, Bhutan
Group discussion		
Moderator: Mr Ule Johansson, Swedish Chemicals Agency		
12.00-13.00	Group discussion	All
13.00-14.00	Lunch	
14.00-15.00	Reporting back from group discussions	All
15.00-15.15	Evaluation of the Forum	All
15.15-15.30	Closing remarks	FDA, Thailand and Swedish Chemicals Agency

Annex 2: List of Participants

Can be obtained upon request. Please contact jenny.ronngren@kemi.se or ule.johansson@kemi.se.