7.2 The Stockholm and Rotterdam Conventions

Summary of role: The Stockholm and Rotterdam Conventions provide for regulations to restrict and control the production, use and trade of toxic and hazardous chemicals for production or as waste. The chemicals covered include some of those associated with plastic production, its use and disposal which can be found with marine plastic litter. The Stockholm Convention prohibits, restricts and sometimes aims to eliminate the production, use and import-export of persistent organic pollutants (POPs). Annexes A and B list POPs that must be eliminated or restricted. Annex C focuses on the minimisation of releases from unintentional production of chemicals it lists. A number of POPs under the control of the Stockholm Convention are used as additives, flame retardants or plasticizers in plastics, such as BDEs, HCHs, PFOSA, its salts and perfluorooctane sulfonyl fluoride. The Rotterdam Convention stipulates a prior informed consent (PIC) mechanism for the international trade of hazardous chemicals. Chemicals that are subject to this procedure are listed in Annex III of the Convention and include some of the chemicals also regulated by the Basel and Stockholm Conventions and associated with the production of plastic products or marine plastic litter (i.e. PCB and DDT).

Summary of recommendations and work status: Since 2017, the COPs of the Stockholm, Rotterdam and Basel Conventions have strengthened their joint work programme including joint effort on hazardous substances from plastic products. They also set up a 'triple COP' meaning that meetings of their respective COPs occur concomitantly or jointly for subjects that fall within the scope of each three such as the regulation of hazardous substances associated with plastic products. Led to successive amendments to the Conventions resulting in the strengthening of scrutiny and control over plastic wastes, hazardous plastic or plastic-associated substances and their associated chemicals (especially additives and plasticizers). New plastic-related POPs were listed for control in 2018.

Keywords/research fields: Stockholm Convention; Rotterdam Convention; Basel Convention; triple COP; function and mandate;; persistent organic pollutants; POPs; prior informed consent; PIC; hazardous chemicals; technical guidelines for the identification and environmentally sound management of plastic wastes and for their disposal; plastic waste partnership; adoption of Conventions in ASEAN+3

7.2.1 Function and mandate: The Stockholm Convention

The 2001 Stockholm Convention on Persistent Organic Pollutants (POPs) (Stockholm Convention) is a global treaty to protect human health and the environment from organic pollutants that remain intact in the environment, bioaccumulate in humans and wildlife and have the potential for long-range environmental transport.

POPs are listed under the Convention and potential new POPs are reviewed for listing by a POP Review Committee. Some additives used in plastic or found in recycled plastics (such as plasticizers and flame

retardants) may be slowly released into the sea from marine plastic litter. Plastics can also adsorb POPs such as PCB, DDT and dioxins which are frequently detected in marine plastic litter, rendering these chemicals more bioavailable to marine animals.

As of 2019, the Convention controls more than 28 POPs, including those which have been used as additives, flame retardants or plasticizers in plastics such as: brominated diphenyl ethers (BDE); hexabromocyclododecane (HBCDD); perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF); and short-chain chlorinated paraffins (SCCP).

This Convention is widely adopted in ASEAN+3. Details of its status are included in Table 1.3.7.1 above.

7.2.2 Function and mandate: The Rotterdam Convention

The 2008 Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention) aims to promote shared responsibility and cooperative efforts among state parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm. It also facilitates information exchange about the characteristics of hazardous chemicals. Annex III of the Convention lists chemicals that are submitted to the prior informed consent procedure (PIC procedure) to ensure that recipients are fully informed of hazardous characteristics and support their environmentally sound use. It includes 52 chemicals. This formal PIC procedure applies to all substances listed in the Basel and Stockholm Conventions that may still be traded but under a number of conditions (e.g. DDT and PCB). Some chemicals, of which the disposal at sea is prohibited under the LC/LP, are also listed in this Annex III (e.g. mercury).

This Convention is widely adopted in ASEAN+3. Details of its status are included in Table 1.3.7.1 above.