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on

"International Conventions on Chemicals and Waste" 07 July 2023 held at

Tamil Nadu Pollution Control Board, Mount Salai, Guindy, Chennai. 600 032





CSIR-National Environmental Engineering Research Institute, Nagpur and Tamil Nadu Pollution Control Board, Chennai, jointly organized a one-day Workshop on "International Conventions on Chemicals and Waste" on 07 July 2023 at TNPCB, Chennai. The workshop was organized as part of the GEF-UNEP funded project "Review and update of National Implementation Plan (NIP) on persistent organic pollutants (POPs) in India". The objective of the workshop is to generate awareness, and build capacity of stakeholders in the state of Tamil Nadu.

The inaugural session of the workshop was attended by Dr M Jayanthi, IFS, Chairperson, TNPCB, Dr S Selvan, Chief Environmental Engineer, TNPCB, Dr M P Patil, Chief Scientist and Head, CHWMD, CSIR-NEERI, Er H. D. Varalaxmi, Sc. E & Regional Director, CPCB, Chennai and Dr A Ramesh Kumar, Principal Scientist and Organising Secretary, CSIR-NEERI.

Dr M P Patil, welcomed the participants. In his opening remarks, he expressed the inability of Dr A N Vaidya, Director, CSIR-NEERI to attend the workshop due to an urgent meeting in Delhi and conveyed his wishes for the successful completion of the workshop. Dr M P Patil spoke about the need for management of hazardous chemicals manufactured in and imported/exported into the country. He also stressed the environmentally sound management of hazardous waste. He spoke about the association of CSIR-NEERI with UNEP since the recognition of CSIR-NEERI as "Stockholm Convention Regional Centre (SCRC) in India. Dr Patil thanked TNPCB for providing the necessary facilities to conduct the workshop in its premises.

Dr A Ramesh Kumar, organising Secretary explained the objective of conducting the workshop in Tamil Nadu. The main aim of the workshop is to generate awareness, engage stakeholders and building country capacity. Dr Kumar explained about the various trainings and workshops organized by SCRC-India for the benefit of stakeholders. He explained about the NIP, its requirement and the need for its updation. The updation of NIP is taken by CSIR-NEERI on behalf of Ministry of Environment, Forest and Climate Change (MoEFCC) as it is the mandatory requirement of the country.

Er H D Varalaxmi, Regional Director, CPCB spoke about the role of CPCB as a regulator, and the implementation of various environmental regulations in India. Understanding of International Conventions viz. Basel, Rotterdam, Stockholm, Minamata, Montreal and Strategic Approach to The International Chemical Management (SAICM) is necessary for the effective implementation of the conventions and the protection of the

environment. She assured the coordination of CPCB with industries, during the process of NIP update.

Dr S Selvan, CEE, TNPCB and Guest of honour, spoke about the various environmental issues in Tamil Nadu and the actions taken by TNPCB to mitigate the issues. He recalled the core of all international conventions on Environment and emphasised the need for technical competency to address all challenges. This is particularly very important as India leads the G20 presidency.

Dr M Jayanthi, Chairperson, TNPCB and Chief Guest in her opening remarks appreciated the lead taken by CSIR-NEERI to fulfil the mandate of the country. She said TNPCB has deputed 30 newly recruited Environmental Engineers/Scientists for this workshop to enhance their capacity and widen their horizon in the field of environment. Dr M Jayanthi appreciated CSIR-NEERI for the development of green crackers and setting-up the testing facility in Sivakasi. She called upon all participants to make the most of the workshop as such workshops are very rare in our country.

The inaugural session ended with the vote of thanks by Dr G Saravanan, Principal Scientist, NEERI, Chennai Zonal Laboratory. He thanked TNPCB for their cooperation and help rendered to conduct the workshop in its premises.

The technical session started with the presentation on "CSIR-NEERI in the Service of Planet" by Dr Amit Bansiwal, Sr Principal Scientist and Head BDPMD, CSIR-NEERI. He gave an overview of NEERI's expertise in the field of Environmental Science and Technology, technologies developed, instrumental facilities available, assistance to various Ministries in policy formulation, matters pertaining to National Green Tribunal (NGT) etc. Dr A Ramesh Kumar, presented an overview of "Basal, Rotterdam, Stockholm, Minamata and Montreal Protocol/Conventions" and explained the key features, mandates and compliance requirements by parties. Dr Sukumar Devotta, Former Director, CSIR-NEERI spoke on "Montreal Protocol on Ozone depleting substances (ODS)". He explained the different ODS and the mechanism of ozone layer depletion. Dr Devotta explained the formation of "Multilateral Fund" by UNEP for helping developing countries in meeting their obligations to phase out ODS. Dr A Ramesh Kumar, in his talk on "Stockholm Convention on POPs" explained about the historical developments, and brought to the participants the changes brought out by the book "Silent Spring" by Rachel Carlson. He explained about the screening criteria adopted by various international conventions for the classification of chemicals.

The second technical session started with the talk on Human Exposure and Ambient Air Concentration of Mercury" by Prof. Krishnendu Mukhopadhyay, SRIHER. He presented the results of the WHO study on mercury exposure in Chennai and discussed the difference in the blood mercury levels. Prof. Mukhopadhyay stressed the need for biomonitoring in India to assess population exposure to chemicals. Dr Paromita Chakraborty gave a talk on "Trends of POPs in ambient air of India". She explained the various emission sources such as industrial emissions, contaminated sites, landfills/dumpsites, and the effects of POPs. Dr Akilesh Kumar Yadav, Scientist, CSIR-IITR, Lucknow talked about "Industrial POPs-Perfluoro Alkyl Substances (PFASs)". He explained about the ubiquitous presence of PFAS due to its use in various consumer products and its lipophobic and hydrophobic properties. He gave a overview of manufacturing details of PFAS in India and the need for its assessment. Dr K P Pratish, Sr Scientist, CSIR-NIIST, Trivandrum spoke on "Dioxins and Furans emissions in India- Current status, challenges and scope for reduction through BAT/BEP". He explained the various sources of dioxins and furans and the importance of monitoring and reduction through BAT/BEP. Dr K P Pratish presented the emission factors developed by NIIST and projected the annual emissions and compared it with WHO recommended intake levels.

Towards the end, a panel discussion was held with all speakers. Dr Sukumar Devotta summarised the discussions and requested participants to put forth their views/perspectives of the workshop theme. Participants interacted with all the speakers and shared their views. Dr A Ramesh Kumar said the comments/views will be put forward to policy makers during the upcoming workshops/meetings.

The workshop was attended by more than 120 participants from TNPCB, CPCB, Industries, Academia and NGOs. The program was conducted by Ms Celin Rebeckal and Ms. M Asrwini, Project Associates of NEERI CZL. The workshop arrangements were made by Dr M. Thirunavoukkarasu, Chief Scientist and Head, NEERI CZL, Dr Sivacoumar, Chief Scientist, Dr G Saravanan, Pr Scientist, Dr T Rajesh, and Dr Jowin Joseph, Sr Scientists, of NEERI CZL and NEERI, Nagpur.