



**One-day Workshop
on
“International Conventions on Chemicals and Waste”
Venue: The Park Htels, Belapur, Navi Mumbai-400614**

Date: September 14, 2023

Time: 10.00-5.30 PM



CSIR-National Environmental Engineering Research Institute, Nagpur and Maharashtra Pollution Control Board (MPCB), Mumbai, Maharashtra jointly organized a one-day Workshop on **“International Conventions on Chemicals and Waste”** on September 14, 2023 at The Park Hotels, Belapur, Navi Mumbai. The workshop was organized as a part of the GEF-UNEP funded **project entitled “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 Maharashtra.

Dr. Avinash Dhakne, IAS, Member Secretary, MPCB formally inaugurated the workshop. Dr Sukumar Devotta, Former Director, CSIR-NEERI, Dr. Pratik Bharne, Regional Director, CPCB Pune, Dr. J. B. Sangewar, Joint Director, MPCB, Dr A. Ramesh Kumar, Principal Scientist and Dr. Sushant B. Wath, Principal scientist and Organising Secretary, CSIR-NEERI were also present in the in-augural session.

Dr. Sukumar Devotta formally welcomed the dignitaries and all delegates-participants on behalf of Dr. A. N. Vaidya, Director, CSIR-NEERI who was unable to attend the workshop due to an urgent meeting in New Delhi. Dr. Devotta conveyed the message of Director to the gathering for the successful completion of the workshop. 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. Sukumar Devotta sensitized the participants about the need of this workshop and also briefed about the various trainings and workshops organized by SCRC-India for the benefit of stakeholders. Dr. Sukumar Devotta highlighted the importance about the management of hazardous chemicals, manufactured and imported/exported into the country. He also stressed on the environmentally sound management of hazardous waste. Dr. Sukumar Devotta thanked MPCB for providing the necessary facilities to conduct the workshop.

Dr. A Ramesh Kumar, briefly explained the aim for conducting the workshop in Maharashtra, as it is one of the major state in India where chemical industries are located and also some of the industrial POPs such as short chain chlorinated parafins (SCCPs), and perfluoroalkyl substances (PFAS) are manufactured. He further told that , the main aim of the workshop is to generate awareness about POPs and engage all stakeholders for capacity building in country related to POP. He also explained about

the National Implementation Plan (NIP), its requirement and the need for its up-dation. And the role of the updation of NIP is being assigned to CSIR-NEERI on behalf of Ministry of Environment, Forest and Climate Change (MoEFCC), and it is the mandatory requirement for all the signatory country.

Dr. Pratik D. Bharne, Regional Director, CPCB highlighted the role of CPCB as a regulator in the implementation of various environmental regulations in India; understanding of International Conventions such as Basel, Rotterdam, Stockholm, Minamata, Montreal and Strategic Approach to The International Chemical Management (SAICM) within the context of waste management rules such as hazardous and other wastes, plastic waste and municipal solid waste management is necessary to protect human health and environment. He further stressed that the problems due to POPs will be mitigated if all waste management rules are implemented in letter and spirit. He assured the coordination of MPCB with industries, during the sampling and data collection.

Dr Sukumar Devotta former Director of CSIR-NEERI in his address spoke about the various dimensions of international conventions and shared his experience in the stand taken by India in ratifying Montreal Protocol. He emphasized the overarching aspects of BRS and Montreal protocol, especially the PFAS group of chemicals and the planetary threat posed by all types of waste, particularly hazardous chemicals and plastic waste.

Dr. J. B. Sangewar spoke about the chemical industries located in Maharashtra and the actions taken by MPCB to mitigate the issues. He informed that Maharashtra has four number of Treatment, Storage, and Disposal Facility (TSDF) in the country for the disposal of hazardous waste.

Dr. Avinash Dhakane, Member Secretary, MPCB and Guest of Honour in his opening remarks appreciated the lead taken by CSIR-NEERI to fulfil the mandate of the country. He said MPCB has deputed about 60 Engineers /Scientists for this workshop to sensitize them about the POP's and enhance their capabilities and capacity in managing hazardous chemicals and related industrial safety. He further said that, the selection of Mumbai as venue for this workshop is most appropriate as maximum number of chemical manufacturing industries are located in Maharashtra. He also stated that environment

is getting polluted due to various industrial and anthropogenic activities. However, remediation measures are on anvil, and emphasised the need for finding out the technical solutions which should be adoptable and cost effective for its wider implementation. He congratulated and thanked CSIR-NEERI for organising the workshop in collaboration with MPCB at Mumbai, and requested all participants for their active participation in workshop.

The inaugural session ended with the vote of thanks by Dr. Sushant B. Wath, Organising Secretary of the Workshop. He thanked MPCB and CPCB for extending all possible cooperation and support needed for the organization of this workshop at Mumbai. Dr. Wath also thanked all guests, invited speakers, organizing committee members and all participants from industries, industry associations, Academic Institutions and NGOs. He informed that this workshop has received overwhelming response from all the stakeholders, and more than 150 participants have attended the workshop. He requested to all the industries for extending all possible support to the officially designated agencies and officials for undertaking POPs related activities during the latter part of this project.

The technical session started with the presentation by Dr. A. Ramesh Kumar, entitled “Basal, Rotterdam, Stockholm, Minamata and Montreal Protocol/Conventions”. Dr. Kumar explained about the technical, and socio-political reasons on the origin of international conventions. Dr. Kumar, further explained about the historical developments, and brought to the participants the changes brought out by the book “Silent Spring” by Rachel Carlson. He briefed on the key features, mandates and compliance requirements of BRS and Minamata conventions by parties. Dr. Kumar explained about the mandatory requirement of Govt. of India on the NIP development and updation as per Stockholm Convention. He requested MPCB and Industries to share data on production and use of listed POPs/chemicals.

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. Devotta explained about the Kigali amendment mandating countries to phase out HFCs as they have higher global warming potential (GWP). Participants interacted with Dr. Devotta on the manufacturing of refrigerants in India, and other countries.

The second technical session post lunch, started with the presentation of Dr. S. Ganesan, Chairman, International Treaties Expert, Indian Chemical Council, Mumbai. He presented about the importance of chemicals in the economic development of any country and the role of chemicals in modern life, including health care. He also presented the India's position in terms of production, import/export, and consumption of chemicals. He briefly talked about the BRS conventions, the procedure adopted for listing of chemicals. He advocated that EU, China and USA are the major chemical manufacturing countries and India should increase its production for the development of the country.

Mr. Nandakumar Gurav, Assistant Secretary (Technical), MPCB, Mumbai presented on 'Waste management and Circular Economy'. He enriched the knowledge of all participants about the existing BAT and BMP related to the waste management and circular economy practiced in various cities in Maharashtra. He also presented some figures of waste generated and processed within Maharashtra.

Dr. Devendra Kumar Patel, Sr Principal 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 an overview of manufacturing details of PFAS in India and the need for its assessment. Dr Patel presented the findings of studies on environmental levels, health impacts and the need for standards for PFAS group.

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 about the various sources of dioxins and furans, and also highlighted the importance of monitoring and reduction through BAT/BEP. Dr Pratish presented the emission factors developed by NIIST and projected the annual emissions and compared it with WHO recommended intake levels.

All expert speakers participated in the panel discussion held at the end of the workshop.. Dr Sukumar Devotta summarised the discussions and requested participants to put forth their views/perspectives/questions of the workshop theme. Participants interacted with all the speakers and shared their views and raised various queries which were responded by respective panellist. Dr A Ramesh Kumar said the

comments/views will be put forward to policy makers during the upcoming workshops/meetings with the appropriate authority officials and ministries.

The workshop was attended by more than 150 participants from MPCB, CPCB, Industries, Industry Associations, Academia and NGOs. Dr. Shalini Tondon, Principal Scientist, NEERI compered the proceedings of the in-augural session whereas the technical sessions were conducted by Ms. Komal Kalawapudi, Technical Officer, NEERI. The programme was made successful due to the dedicated efforts and involvement of Dr Sushant Wath, Principal Scientist of CSIR-NEERI, Nagpur, Dr. Yogesh Pakade, Sr. Scientist, CSIR-NEERI, Nagpur, Dr. Shalini Tandon, Principal Scientist, CSIR_NEERI, Er G S Kanade, Sr Principal Scientist CSIR-NEERI, Mr. Abhijit Kasbe, Field Officer, MPCB, Mumbai and all students volunteers, who look after the various workshop arrangements.