# THIRTEENTH WORKSHOP ON ENVIRONMENTAL MONITORING OF PERSISTENT ORGANIC POLLUTANTS (POPs) IN EAST ASIAN COUNTRIES

# Chairpersons' Summary January 31, 2020 NOVOTEL Bangkok Ploenchit Sukhumvit, Bangkok, Thailand

- The 13<sup>th</sup> Workshop on Environmental Monitoring of Persistent Organic Pollutants (POPs) in East Asian Countries commenced on January 29, 2020 at NOVOTEL Bangkok Ploenchit Sukhumvit, Bangkok, Kingdom of Thailand.
- 2 The workshop was organised by the Ministry of the Environment, Japan (MOEJ) and the Ministry of Natural Resources and Environment (MONRE), Thailand. Government officials and technical experts from 9 countries (Cambodia, Indonesia, Japan, Republic of Korea (ROK), Lao PDR, Malaysia, Mongolia, Thailand and Vietnam), Secretariat of Basel, Rotterdam and Stockholm Convention (BRS), United Nations Environment Programme (UNEP) and resource person from Örebro University participated in the Workshop. The List of Participants is attached as ANNEX I.
- 3 Dr. Takuya SHIOZAKI, the secretariat of the Workshop, Japan Environmental Sanitation Center (JESC) started the workshop by welcoming the opening speaker.
- 4 Dr. Reiko MIZUTANI, Deputy Director, Environmental Health and Safety Division, Environmental Health Department, MOEJ gave her opening address to the participants.
- 5 Prof, Reiko SODENO, Shibaura Institute of Technology (SIT) and Dr. Yasuyuki SHIBATA, National Institute for Environmental Studies (NIES) were designated as the chairperson and the co-chairperson of the workshop, respectively. The participants confirmed and accepted the draft agenda.

#### (Background and objective)

- 6 Participants noted the following presentations:
  - (1) Introduction to the 13th Workshop, by Dr. Reiko MIZUTANI (MOEJ);
  - (2) Overview of the past activities of POPs Monitoring Project in East Asian Countries, by Dr. Takuya SHIOZAKI (Secretariat, JESC); and,

(3) Progress of Global Monitoring Plan toward the effectiveness evaluation of the Stockholm Convention by Ms. Katarina MAGULOVA (BRS Secretariat).

(Present Status of POPs Monitoring Activities in the Member Countries)

Participants noted the presentations of Present status of the POPs Monitoring Activities in the Member Countries by the delegates from Cambodia, Indonesia, Japan, ROK, Lao PDR, Malaysia, Mongolia, Thailand and Vietnam.

# (Progress of the UNEP/GEF GMP2-Asia Project)

Participants noted the presentation of UNEP/GEF POPs Global Monitoring Plan Projects in the Africa, Asia, the Pacific, Latin America and Caribbean Regions 2016-2020 by Mr. Gamini MANUWEERA (UNEP). The significance of continuation of the GEF project was raised by participants.

(Consideration on the Establishment of Core Laboratories under the POPsEA Project)

- 9 Participants noted the following presentations:
  - (1) Proposal on the Execution Plan for the Establishment of Core Laboratories by Dr. Takuya SHIOZAKI (Secretariat);
  - (2) Outcome and future implementation of POPs Analysis Training Programme by Republic of Korea; and,
  - (3) Existing capacity of POPs monitoring core laboratories under the POPsEA project by Japan, ROK and Thailand.
- 10 Participants recognised the significance of preparation of the operating procedure for keeping their technical skills.
- 11 It was agreed that the Secretariat will provide Terms of Reference describing the activities of the additional Core Laboratories through the consultation with the candidate countries.

# (Holding two working group meeting)

12 Participants were divided into two groups on the second day, the Policy Group (Chair: Prof. Reiko SODENO) and the Expert Working Group (Chair: Dr. Yasuyuki SHIBATA).

#### (Policy Group meeting)

13 The Policy Group meeting discussed and adopted the structure and procedure to prepare the 3<sup>rd</sup> Sub-regional Report of POPsEA project. It was confirmed that the cooperative monitoring in FY2020 would be implemented in Mongolia. It was

recognised that the next workshop would be held in FY2021 hopefully in Philippines. The summary report from the Policy Group meeting is attached as ANNEX II.

# (Expert Working Group meeting)

14 The Expert Working Group meeting considered the preparation of 3<sup>rd</sup> Sub-regional report of POPsEA project, reviewed and accepted POPs monitoring data. The summary report from the Expert Working Group meeting is attached as ANNEX III.

# (Plenary meeting)

- 15 The Plenary was informed of the contents of the reports from the two groups. Clarification and discussion were made on the reports of the two groups. The contents of the reports were endorsed by the Plenary.
- 16 It was agreed that the 3<sup>rd</sup> Sub-Regional Report would be prepared by summarising the obtained data and submitted to the ROG. The interpretation of the monitoring data in each participating country would be considered in the preparation of the next sub-regional report.
- 17 Ms. Pornpimon CHAREONSONG, Director of Waste and Hazardous Substance Management Division, Pollution Control Department, MONRE, Thailand gave her closing remarks to the participants.
- 18 Upon closing, the participants expressed their sincere appreciation to the Ministry of the Environment, Japan, Pollution Control Department / Ministry of Natural Resources and Environment, Thailand and the Secretariat for their efforts to host and organise the 13<sup>th</sup> Workshop.

**END** 

# ANNEX I List of Participants

#### Cambodia

# Dyakanal SOPHAL (Mr.)

Senior Officer, Department of Hazardous Substance Management, Ministry of Environment

#### **Indonesia**

# Annisa LUTFIATI (Ms.)

Staff of Sub Directorate for Implementation of Hazardous Substance Convention, Directorate for Hazardous Substance Management, Ministry of Environment and Forestry

#### Ernawita NAZIR (Ms.)

Head of Subdivision Referral Laboratory and Management, Research and Development Center for Environmental Quality and Laboratory, Ministry of Environment and Forestry

#### <u>Japan</u>

#### SODENO, Reiko, Dr. (Ms.)

Professor, Department of Architecture and Environment Systems, College of Systems Engineering and Science, Shibaura Institute of Technology

# SHIBATA, Yasuyuki, Dr. (Mr.)

Fellow, Center for Environmental Measurement and Analysis, National Institute for Environmental Studies

#### NAKANO, Takeshi, Dr. (Mr.)

Guest Professor, Research Center for Environmental Preservation, Osaka University

#### SUZUKI, Noriyuki, Dr. (Mr.)

Director, Center for Health and Environmental Risk Research, National Institute for Environmental Studies

# TAKASUGA, Takumi, Dr. (Mr.)

Executive Director, Shimadzu Techno Research, Inc.

#### TAKAZAWA, Yoshikatsu, Dr. (Mr.)

Senior Researcher, Center for Environmental Measurement and Analysis, National Institute for Environmental Studies

#### MIZUTANI, Reiko, Dr. (Ms.)

Deputy Director, Environmental Health and Safety Division, Environmental Health Department, Ministry of the Environment

### Korea, Republic of

# Young-Hee KIM, Dr. (Ms.)

Senior Researcher, Chemicals Research Division, Environmental Health Research Department, National Institute of Environmental Research

#### Young-Sun DO (Ms.)

Researcher, Chemicals Research Division, Environmental Health Research Department, National Institute of Environmental Research

#### Lao PDR

# Vanhna PHANPHONGSA (Mr.)

Acting Director, Environmental Quality Monitoring and Analysis Division, Natural Resources and Environment Research Institute, Ministry of Natural Resources and Environment

# Thilakone SISOUPHANH (Mr.)

Technical Staff of Environment Quality Monitoring and Analysis, Natural Resources and Environment Research Institute, Ministry of Natural Resources and Environment

#### Malaysia

# Thahirah KAMARULZAMAN (Ms.)

Senior Principal Assistant Director, Hazardous Substance Division, Department of Environment, Ministry of natural Resources and Environment

# Tunku Khalkausar Binti TUNKU FATHAHI (Ms.)

Director, Department of Environment, State of Keoah

#### **Mongolia**

# Enkhtuul SURENJAV, Dr. (Ms.)

Principal Researcher, Laboratory of Inorganic Chemistry, Institute of Chemistry and Chemical Technology, Mongolian Academy of Science

#### **Thailand**

#### Pornpimon CHAREONSONG (Ms.)

Director, Waste and Hazardous Substances Management Division, Pollution Control Department, Ministry of Natural Resources and Environment

# Teeraporn WIRIWUTIKORN (Ms.)

Director, Hazardous Substance Division, Waste and Hazardous Substance Management Bureau, Pollution Control Department, Ministry of Natural Resources and Environment

#### Ruchaya BOONYATUMANOND, Dr. (Ms.)

Environmental Scientist, Environmental Research and Training Center, Department of Environmental Quality Promotion

#### Wischada JONGMEVASNA, Dr.(Ms.)

Medical Scientist, Senior Professional Level, Bureau of Quality and Safety of Food, Department of medical Sciences, Mistry of Public Health

# Sirichai SUNYA, Dr.(Mr.)

Medical Scientist, Professional Level, Bureau of Quality and Safety of Food, Department of medical Sciences, Mistry of Public Health

#### Weerawut WITTHAYANAN, (Mr.)

Medical Scientist, Professional Level, Bureau of Quality and Safety of Food, Department of medical Sciences, Mistry of Public Health

# Chułimon UTTAWICHAI, (Ms.)

Medical Scientist, Toxicology Center, National Institute of Health, Department of Medical Sciences, Ministry of Public Health

# Vietnam

#### Linh Thuy DANG (Ms.)

Officer, Department of Environmental Quality Management, Vietnam Environment Administration, Ministry of Natural Resources and Environment

#### Phuong Thi Ha NGUYEN (Ms.)

Researcher, Analytical Laboratories for Environment, Dioxin and Toxins, Northern Center for Environmental monitoring, Vietnam Environment Administration, Ministry of Natural Resources and Environment

# <u>Secretariat of the Basel, Rotterdam and Stockholm Conventions</u> Katarina MAGULOVA (Ms.)

Programme Officer, Basel, Rotterdam and Stockholm Convention Secretariat, United Nations Environment Programme

# **United Nations Environment Programme**

# Gamini MANUWEERA (Ms.)

Programme Management Officer, Knowledge and Risk Unit, Chemicals and Health Branch, Economy Division, United Nations Environment Programme

### Örebro University

# Heidelore FIEDLER, Prof. (Ms.)

Professor in Chemistry, School of Science and Technology, Örebro University

# <u>Secretariat</u>

# ICHIKAWA, Yoshimi (Ms.)

Technical Staff, Environmental Sciences Department, East-Japan Branch, Japan Environmental Sanitation Center

# KAJI, Fumio (Mr.)

Engineer, Environmental Sciences Department, East-Japan Branch, Japan Environmental Sanitation Center

#### SHIOZAKI, Takuya Dr. (Mr.)

Senior Manager, Environmental Sciences Department, East-Japan Branch, Japan Environmental Sanitation Center

**END** 

# ANNEX II Summary Report of the Policy Group (PG) Meeting

30 January 2020

Chairperson: Prof. Reiko SODENO (Shibaura IT)
Participants: Mr. Dyakanal SHOPHAL (Cambodia)

Ms. Annisa LUTFIATI (Indonesia)
Dr. Reiko MIZUTANI (Japan)
Dr. Young-Hee KIM (ROK)

Mr. Vanhna PHANPHONGSA (Lao PDR)

Ms. Tunku Khalkausar Binti TUNKU FATHAHI (Malaysia)

Ms. Teeraporn WIRIWUTIKORN (Thailand)

Ms. Linh Thuy DANG (Vietnam)

Ms. Katarina MAGULOVA (BRS Secretariat)

Mr. Gamini MANUWEERA (UNEP)
Dr. Takuya SHIOZAKI (Secretariat)
Ms. Yoshimi ICHIKAWA (Secretariat)

- The Secretariat introduced the draft Sub-regional report for the workshop to review as follows:
  - Background and objective, criteria for selecting site location were explained. The
    data of Thailand, Cambodia and Malaysia are included in the report. Lao PDR
    and Indonesia just implemented monitoring in 2018.
  - The draft report will be reviewed by MOEJ then submitting to ROG before submitting to BRS Secretariat.
  - The Secretariat will send to ROK the format and asked to provide the data for the sub-regional report by middle of February 2020.
- 2. Participants discussed and agreed as follow:
  - ROK agreed to submit data and asked about interpretation and trend of data.
  - The interpretation of the Super-site monitoring data would be provided to ROG after preparing the sub-regional report.
  - The structure of the draft sub-regional report was adopted.
- 3. Participant from the Republic of Korea presented the situation of the POPsEA Information Warehouse:

- The Warehouse website was created in 2005 and was updated several times. The Korean government decided to close the system due to its low utilization and low data availability. There were difficulties to obtain data from participating countries and to make continuity as the national contact persons kept changing. It was also considered to be preferable to prevent from duplicating with UNEP GMP Data Warehouse.
- The Korean government suggested to allocate resources for the POPsEA training program instead.
- Participants asked whether the website can accommodate other pollutants beside POPs and ROK explained that unfortunately the website will be shut down after the end of June. National data will still be accessible in Korean language.
- 4. Ms. Katarina MAGULOVA, BRS Secretariat presented the progress and current status of POPs Data Warehouse:
  - The data warehouse is operated by RECETOX based in Czech Republic.
  - The data warehouse is based on online webtool with data import and approval mechanism. It allows for aggregated and disagregated data import as well as statistical evaluation, data processing and visualization.
  - Currently GMP2 is still available until GMP3 is completed and published. It is updated every 6 years.
  - Users include ROG members, data providers, Secretariat, GCG members and general public.
  - Data are approved by ROG and can be shown in the form of spatial distribution, summary statistics, trend, etc.
- Templates for data submission are already available. The ROG members from each region have to submit to RECETOX list of people and their e-mails, which are authorized to provide data..
- The list of sites in GMP Data Warehouse including the relevant meta-data, should be updated as necessary during the GMP-3 data entry process as well.
- It was clarified that national data can be added given that they meet requirements/criteria such as core media (air, water, human milk). Hot spot data and episodic measurements are not accepted as GMP emphasizes long term trends in background sites and human data from general public.
- For user name and password to log in, members should request Dr. Shibata (ROG) for support.
- 5. It was agreed that air data should be submitted to sub-regional report while other data should be submitted to ROG and parameters must be based on Chapter 5 of the GMP Guidance Document explaining about parameters to be measured.

- 6. The Secretariat explained the past cooperative monitoring activities and proposed two countries for the implementation of Cooperative Monitoring in 2020 and 2021 under the POPsEA project.
  - ROK and Japan monitor POPs at their own super sites, respectively.
  - Regarding cooperative monitoring, Japan supports budget for dispatching engineers, preparing sampling materials while member countries are responsible for domestic expenses.
  - Possible locations for future cooperative monitoring include Terelj, Mongolia and Sihanoukville, Cambodia. It was proposed that Mongolia POPs monitoring would be implemented in August 2020 as the weather permits.
  - Cambodia and Vietnam will inform the decision whether to join cooperative monitoring in 2021.
  - Secretariat asked the Philippines and Thailand to implement national monitoring and duplicate samples will be analysed by the Philippines and Thailand as well as by the Secretariat.
  - Thailand has capacity to monitor dioxin in abiotic matrix in particular in ambient air. It can be set as the first priority in the National POPs Monitoring Plan which is being developed. In case of monitoring POPs in biotic matrix can be considered to be included in the plan as well. Capacity building can be implemented but for extensive monitoring should be proposed (Terms of Reference) to PCD.
- 7. The Secretariat explained about the history of POPsEA workshop that the first one was held in Japan in 2002 and was organized almost annually. The Secretariat proposed the Philippines to host the next workshop. If not, the Secretariat will decide the venue after consultation with the member countries.
- 8. Mr. Gamini MANUWEERA, UNEP representative, explained about stakeholder consultation meeting of the UNEP/GEF POPs monitoring and presented some highlights of the outcome. It was focused on human milk, air and water monitoring and inter-laboratory assessment program including capacity assistance. He further explained the possible areas of collaboration include analytical capacity building, networking and data generation and asked POPsEA to consider reviewing the scope and role to harmonize with future GEF projects. The participants noted the proposal from UNEP and the importance of collaboration with UNEP.

# **ANNEX III**

# Summary Report of the 10th Expert Working Group (EWG) Meeting

30 January 2020

Chairperson: Dr. Yasuyuki SHIBATA (NIES)

Participants: Ms. Ernawita NAZIR (Indonesia)

Prof. Takeshi NAKANO (Japan) Dr. Takumi TAKASUGA (Japan)

Dr. Yoshikatsu TAKAZAWA(Japan)

Ms. Young-Sun DO (ROK)

Mr. Thilakone SISOUPHANH (Lao PDR)

Ms. Thahirah Binti KAMARULZAMAN (Malaysia)

Dr. Enkhtuul SURENJAV (Mongolia)

Dr. Ruchaya BOONYATUMANOND (Thailand)

Ms. Wichada JONGMEVASMA(Thailand)

Mr. Methawaj RUNGSIRIWORAPONG (Thailand)

Mr. Sirichai SUNYA (Thailand)

Ms. Chutimon UTTAWICHAI (Thailand)

Mr. Weerawut WITTHAYANAN (Thailand)

MS. Phuong Thi Ha NGUYEN (Vietnam)

Prof. Heidelore FIEDLER (Örebro University, Sweden)

Mr. Fumio KAJI (Secretariat)

- 1. The results of cooperative monitoring as well as super-site monitoring in the following countries were reported.
  - (1) Nalongkhoun, Lao PDR (2017)
  - (2) Kototabang, Indonesia (2018)
  - (3) Jeju Island, Republic of Korea (2016-2018)
  - (4) Cape Hedo, Okinawa Island, Japan (2016-2018)
  - EWG reviewed the data, including LOD/LOQ, recovery, blank levels, and duplicate analysis, and concluded that all the data obtained by HV samplers were acceptable except aldrin which showed poor recovery.
  - As for passive air sampling (PAS) trial in Lao and Indonesia, comparison between the data of POPsEA and GMP2 program under UNEP/GEF was recommended. It

- was also pointed out that PAS data in GMP2 was presented in pg/PUF due to difficulties to reveal sampling volume for each type of chemical in each location.
- Exchange of opinions on the possibility of mirror analysis of PAS in the sampling country was conducted.
- EWG noted temporal trends observed in super-site monitoring data, particularly DDTs, HCHs, and Endosulfan in Jeju and DDTs, HCHs, and HCBD in Okinawa, and encouraged further continuation of the monitoring at supersites in Jeju Island and Cape Hedo.
- 2. The secretariat explained a plan of the compilation of 3<sup>rd</sup> sub-regional report.
  - EWG agreed the plan. EWG also agreed to include the presented data to the 3<sup>rd</sup> regional report in Asia-Pacific of the Stockholm Convention. EWG further pointed out the importance of conducting trend analysis of the monitoring data by the owner country and including the results in the sub-regional report.
- 3. EWG noted the following presentations from the experts.
  - (1) Analytical methods for short-chain chlorinated paraffins and current issues, by Dr. Yoshikatsu TAKAZAWA (NIES, Japan)
  - (2) Result and Discussion of Latest Interlaboratory Comparison Study Implemented by UNEP, by Prof. Heidelore FIEDLER (Örebro University, Sweden)
  - (3) PCB/PCN monitoring, Prof. Takeshi NAKANO (Osaka University, Japan)
  - As for higher proportion of unsatisfactory data in fish samples in the interlaboratory study, difficulties in POPs analysis in foods without knowing detailed information including their levels were pointed out from a participating country.
- 4. The secretariat proposed a future implementation plan of the cooperative and individual monitoring under the POPsEA project, including the proposal of national monitoring and mirror analysis as part of capacity building of core laboratories.
  - EWG took note on the possibility to conduct mirror analysis by a laboratory other than core laboratories if requested.
  - It was clarified that national monitoring for core laboratories is expected to be a background monitoring once a year.