Malé Declaration on Control and Prevention of Air Pollution and lts Likely Transboundary Effects for South Asia

Report of the Training Programme on Wet Deposition Monitoring

4 - 9 August 2003
CPCB, Delhi, India

REPORT

TRAINING PROGRAMME ON WET DEPOSITION MONITORING

4 – 9 August 2003, CPCB, Delhi, India

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LIST OF ACRONYMS

AIT	Asian Institute of Technology
CPCB	Central Pollution Control Board
IVL	IVL Swedish Env ironmental Research Institute
MoC	Monitoring Committee
NIA	National Implementing Agency
QA/ AC	Quality Assurance / Quality Control
SACEP	South Asia Co-operativ e Env ironment Programme
SEI	Stockholm Env ironment Institute
Sida	Swedish International Cooperativ e Dev elopment Agency
UNEP/ RRC.AP	United Nations Env ironment Programme / Regional Resource Center for Asia and the Pacific

R E P O R T

The regional training on monitoring transboundary air pollution was held at Central Pollution Control Board (CPCB), New Delhi, India during 4 – 9 August 2003. The major objective of the training is to provide hands-on experience on analysis of transboundary pollutants in the rainwater (wet deposition). This centralized training program was to build the national capacity and to discuss the issues encountered in operating the monitoring sites in each country. This is the second regional training program under the Malé Declaration on the Control and Prevention of Air Pollution and its Likely Transboundary Effects for South Asia.

The training program was attended by laboratory technicians who are in charge of Malé Monitoring Station in participating countries as well as the members of Monitoring Committee (MoC), SACEP, IVL, UNEP, and AIT. A list of the participants is enclosed in Attachment 1.

The training was organised by UNEP RRC.AP, in collaboration with SACEP, IVL, SEI and CBCP, Ministry of Environment & Forests, India. The training was funded by Sida as a part of the Programme on Atmospheric Environment Issues in Developing Countries.

1. Opening Session

The training program started with the welcome and opening address by Dr. S.D. Makhij ani, Additional Director, CPCB, Mylv akanam Iyngararasan (UNEP RRC.AP) , Pradyumna Kumar Kotta (SACEP) , Dr. Nalini Bhatt, Director, MoEF and follow by Dr. B. Sengupta, Member Secretary, CPCB. Opening remarks were followed by the self-introduction of participants. The opening session was ended by v ote of thanks by Mr. J. S. Kamyotra, CPCB.

2. Introduction of Phase II

This training was the centraliz ed training program after the first training program, which was held at UNEP RRC.AP, Bangkok during 29 – 31 may 2002. Mr. J. S. Kamyotra, CPCB presented the ov erv iew of Phase II implementation (attachment 2) . After that Mylv akanam Iyngararasan of UNEP-RRC.AP presented a brief on the proj ect obj ectiv es; the activ ities during the Phase II implementation of Male' Declaration; and the obj ectiv e of the training program (Attachment 3)

3. AIRPET - Regional Air Pollution Research Program

Kim Oanh N. T., Associate Professor from AIT presented regional air pollution research program, which is also funded by Sida. Presentation is prov ided in attachment 4. For more information on the proj ect, please v isit following website: http: / / www.serd.ait.ac.th/ airpet/

4. Objectives, Rationale for, and the Design of the Malé Network

Sagar Dhara, MoC member prov ide information on obj ectiv es of Male' Network and the tasks req uired to fulfill these obj ectiv es. Detail of the presentation is giv en in the attachment 5.

5. Technical Session

Technical session was conducted in fiv e modules on analysising rainwater and each module included lectures ex plaining the theory and practical session in the laboratory. Module 1 cov ered methods of analysis for pH, EC, acidity and alkalinity. Methods of analysis and significance of sodium and potassium was cov ed under the module 2. Analysis of calcium and magnesium was included in module 3 while module 4 cov ered chloride and sulphate. Methods of analysis and significant of Nitrate and Ammonium were cov ered in the module 5.

QA/ QC program also introduced to the participants. It included the followings:

- Ambient air q uality monitoring techniq ues and q uality assurance. (see Attachment 8a)
- Basic Statistical Methods for Quality Assurance (QA) and Quality Control (QC) schemes in water laboratories (see Attachment 8b) .
- Good laboratory practice and safety (see Attachment 8c)

During the last two days participants were div ided into three groups. Each group analyz ed 2 blind samples for each of the parameters cov ered in module 1 to module 5.

Results from each of the group were presented at the end of the program and each of the data points were discussed for possible errors and improv ements. The results were also interpreted and each of the groups was ev aluated for their performance.

A technical manual prepared for this training program is

av ailable as a separate v olume.

On the 6th day of the training program participants v isited the tarnsboundary air q uality monitoring station setup by CPCB at Agra. The Agra station is monitoring the pollution lev el at the Thaj mahal.

6. Closing Session

During the closing session, Surendra Shrestha, Regional Director and Representativ e for UNEP RRC.AP/ ROAP presented the certificates to all the participants. J. S. Kamyotra, organiz er form CPCB deliv ered the closing remark and thanked all the resource persons and the participants.