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

#### STAKEHOLDER'S MEETING

Hotel 'The Park', 15, Sansad Marg, New Delhi – 110 001 (INDIA)

**September 24, 2002** 

### Jointly organised by CPCB – Delhi, SACEP and UNEP/RRC-AP

Air pollution is an emerging environmental issue in Asia as it is in other parts of the world. In particular, emissions of Sulphur dioxide and Nitrogen oxides have been rising steadily over the past few decades. In addition, rapid growth of cities, together with associated expansion of industry and transport systems, has made the Asia region increasingly concerned with these emissions.

To cope with the issue of Transboundary Air Pollution in South Asia, the "Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia" was discussed and adopted by Ministers of the Environment at the Seventh Meeting of the Governing Council of South Asia Cooperative Environment Programme (SACEP), held on April 22, 1998 in Male, Republic of Maldives.

The Malé Declaration stated the need for the countries to carry forward or initiate studies and programme on Air Pollution in each country of South Asia.

Member countries of the Malé Declaration include:

Bangladesh;

Maldives;

Bhutan;

Nepal;

India:

Pakistan:

Iran

Sri Lanka.

The Implementation of Malé Declaration is divided in phases:

Phase - I

Started in 1999 saw the establishment of the network of organisations to implement the Declaration and compilation of Baseline information on Air Quality Monitoring and Management in the participating countries.

Baseline studies provided the valuable information on tackling the transboundary air pollution in the participating countries and clearly identified the gaps in the existing monitoring system.

#### Phase - II

The objective of the phase – II is to put in place the expertise equipment and information, needed for the quantitative monitoring, analysis and policy recommendations for eventual prevention / control of air pollution. The specific objectives of this phase are:

- Expanding the existing network;
- Establishing / strengthening monitoring facilities; and
- Study the transboundary effects of Air Pollution.

The main aims of the Stakeholders Meeting are:

- Increase the awareness on Malé Declaration;
- Share and receive the Stakeholders' views and ideas on the Implementation of Malé Declaration;
- Improve the information exchange between information generators and users.

Eleven monitoring sites have been identified in India for establishing the monitoring stations to study the transboundary movement of air pollution.

#### **Stakeholders Meeting Objectives**

- To inform the Stakeholders about the Malé Declaration and its Implementation;
- To raise awareness and create an Air Pollution Impact Network;
- To seek involvement of the Stakeholders in Implementation of the Malé Declaration;
- To seek view of the Stakeholders in preparation of national level action plan to cope with the national air pollution problem;
- To obtain the view of the Stakeholders for further strengthening of Malé Declaration;
- To facilitate the dissemination of project findings to all the Stakeholders.

#### Agencies involved:

- UNEP (United Nations Environment Coordination Programme)
- SACEP (South Asia Cooperative Sub Regional Inter Environment Programme)
   Sub Regional Inter governmental body
- SEI (Stockholm Énvironment Technical Support Institute)
- SIDA (Swedish International Financial Support Cooperation Development Agency)

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

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

I Recognizing the potential for increase in air pollution and consequential phenomena due to concentration of pollutant gases, acid rain or acid deposition as well as the impacts on the health of humans and other living organisms in all our countries due to man made and natural causes; and also

Recognizing the potential for increase in transboundary air pollution as a corollary of air pollution in each country; and

Realising that the potential for air pollution increase and its transboundary effects will accumulate in the absence of national measures to abate and prevent such potential; and Reiterating in this context Principle 21 of the UN declaration on the Human Environment in 1972 which stated that States have, in accordance with the charter of the United Nations and the principle of international laws, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction;

Keeping in mind that need for constant study and monitoring of the trends in air pollution with a view to understand the extent of our potential for damage to the environment and health in the member countries and taking consequential measures to strengthen and build capacity for such activities; Stressing the need for development and economic growth that will help build up the quality of life and incomes of all the people of all the region, in particular the poorer sections of the population, having due regard to the need to have a clean and healthy environment;

Emphasising that air pollution issues have to be analysed and managed in the wider framework of human and sustainable development within each country and within the region; and

Drawing from the experience of co-operation in the region in matters like cultural exchange and also from the experience in other regions like Europe and sub-regions of Asia like ASEAN and East Asia.

We declare that countries of this region will initiate and/or carry forward programmes in each country to

1. Assess and analyse the origin and causes, nature, extent and effects of local and regional air pollution, using the in-house in identified institutions,

universities, colleges etc., building up or enhancing capacities in them where required;

- 2. Develop and/or adopt strategies to prevent and minimise air pollution;
- 3. Work in co-operation with each other to set up monitoring arrangements beginning with the study of sulphur and nitrogen and volatile organic compounds emissions, concentrations and deposition;
- 4. Co-operate in building up standardised methodologies to monitor phenomena like acid depositions and analyse their impacts without prejudice to the national activities in such fields;
- 5. Take up the aforesaid programmes and training programmes which involves then transfer of financial resources and technology and work towards securing incremental assistance from bilateral and multilateral sources;
- 6. Encourage economic analysis that will help arriving at optimal results;
- 7. Engage other key stakeholders for example industry, academic institutions, NGOs, communities and media etc. in the effort and activities.

We also declare that we shall constantly endeavor to improve national reporting systems and strengthen scientific and academic effort in the understanding and tackling of air pollution issues.

We further declare that we shall continue this process in stages with mutual consultation to draw up and implement national and regional action plans and protocols based on a fuller understanding of transboundary air pollution issues. We declare that in pursuit of the above, we shall evolve, as appropriate, institutional structures at the national level, including networking, both for the purposes of policy and the technical requirements, and we shall use the good offices of regional, international bilateral and multilateral agencies in this, as appropriate.

## **Programme**

#### STAKEHOLDERS MEETING

## IMPLEMENTATION OF MALÉ DECLARATION ON PREVENTION AND CONTROL OF AIR POLLUTION AND ITS LIKELY TRANSBOUNDARY EFFECTS FOR SOUTH ASIA

#### **Programme**

09.00 - 09.3009.30 - 10.15 Registration Inauguration

- Welcome by Dr. B. Sengupta, Member Secretary, CPCB
- Address by Sh. Surendra Shreshtha, Director, UNEP-RRC/AP
- Address by Sh. Mahboob Elahi, Director General, SACEP
- Remarks by Sh. R. Rajamani, Ex Secretary, MoEF
- Inaugural Address by Sh. Dilip Biswas, Chairman, Central Pollution Control Board
- Vote of Thanks by Dr. S.D. Makhijani, Addl. Director, CPCB

10.15 - 10.30 10.30 - 01.00 Tea Break

- Brief Presentation of Malé Declaration
- Tackling Transboundary Air pollution in Asia with a focus on Malé Declaration
- An Introduction to European Experience with Air Pollution and the Inter-governmental Policy Response
- Sh. J.S. Kamyotra, CPCB
- Sh. M. lyngararasan, UNEP
- Sh. Vikrom Mathur, SEI
- Air Quality Status and Policy to Control Air Pollution in India with special reference to Vehicular Pollution
- Indian Power Sector Scenario
- Dr. B. Sengupta, Member Secretary, CPCB
- Dr. R.S. Sharma / Sh. Mohit Bhargava, NTPC

from power plant / large scale **CPCB** industries - Present and future approach 01.00 - 02.00Lunch Break 02.00 - 03.00Tackling Transboundary Air - Dr. T.S. Panwar, Pollution - Approach TERI 03.00 - 03.15Tea Break 03.15 - 04.15 Discussions 04.15 - 05.00• Recommendations

Control Strategy for emission -

Sh. Lalit

Kapur,



#### MINUTES OF THE MEETING

The Stakeholders Meeting on Malé Declaration on "Control and Prevention of Air Pollution and its Likely Transboundary Effects for South Asia" was held on September 24, 2002 at Hotel 'The Park', New Delhi (INDIA). About 50 participants from all sectors as well as UNEP, SEI, SACEP participated in the Meeting (Attachment –1).

The Meeting was inaugurated by Mr. Dilip Biswas, Chairman, Central Pollution Control Board (Ministry of Environment & Forests, Govt. of India), Delhi. Mr. Biswas spoke at length on the State of Environment, particularly Air pollution and pointed out the need for experts to collectively resolve the problem. He called upon all the participants to make the best use of the Meeting.

- Dr. B. Sengupta, Member Secretary, Central Pollution Control Board (Ministry of Environment & Forests, Govt. of India), Delhi. Welcomed the dignitaries and participants of the Meeting. Dr. Sengupta in his address outlined the aims and objective of the Meeting.
- Mr. Surendra Shrestha, Director, UNEP-RRC/AP noted in his remarks that the Malé Declaration on "Control and Prevention of Air Pollution and its Likely Transboundary Effects for South Asia" has been acknowledged and discussed at other regional programmes. Mr. Shrestha reiterated the growing priority Air pollution is getting at scientific and political level because it is affecting the health of the people.
- Mr. Mehboob Elahi, Director General, South Asia Cooperative Environment Programme (SACEP) laid emphasis on importance of generating quality and reliable data. He also added that India, being a large country, the results of studies would be relevant to other countries of the region.
- Mr. R. Rajamani, Ex Secretary, Ministry of Environment & Forests (Govt. of India) highlighted the importance of Malé Declaration, being the first agreement on Environment in the Region and it being now considered as an example of Sub Regional Cooperation for environmental issues in South Asia.

After the opening ceremony, Mr. J.S. Kamyotra, Central Pollution Control Board, Delhi made a presentation on Malé Declaration. This was followed by presentations from Mr. M. lyngararasan, UNEP-RRC/AP on "Tackling Transboundary Air Pollution in Asia with a focus on Malé Declaration" and by Mr. Vikrom Mathur, SEI on "European Experience with Air Pollution and the Inter-Governmental Policy Response".

Dr. B. Sengupta, Member Secretary, Central Pollution Control Board, Delhi made a presentation on "Air Quality Status in India and Policy to Control Air Pollution". Presentations on Indian Power Sector Scenario and the Control Strategy for Emissions from Power Plants and Large Scale Industries were made by Mr. Mohit Bhargava, National Thermal Power Corporation (NTPC), Delhi (India) and Mr. Lalit Kapur, Central Pollution Control Board, Delhi.

The post lunch session started with the presentation by Dr. T.S. Panwar, Tata Energy Research Institute (TERI), Delhi on "Tackling Transboundary Air Pollution – Approach". The participants then deliberated on the Steps for increasing awareness on Air Pollution and involvement of the Stakeholders in the Implementation of Malé Declaration. At the end of the discussions, a set of recommendations was finalised and agreed by the participants (Attachment – 2).

## **RECOMMENDATIONS**

- 1. All the stakeholders who have been sensitized to the Male Declaration process would in turn disseminate information amongst their own colleagues / group/ communities.
- 2. This kind of information dissemination must lead to greater awareness of the localized air pollution on health, soil, crop production, heritage monuments, ecosystem etc.
- 3. In a sub-region where the process of industrialization and power production are bound to increase dramatically in the next few decades that also impacts on human health and environment. It is vital that preventive steps are taken rather than wait until problems occur.
- 4. Trans boundary air pollution will be adding to local air pollution and therefore must be addressed seriously, but this must be done only on the basis of clear scientific findings.
- 5. The monitoring setup proposed must gradually cover all air pollutants. It's findings must be analyzed and mutually discussed within the countries to locate the source of concern and manner in which it can be addressed.
- 6. There should be wider participation in monitoring by academic institutions in the vicinity of stations and also the agricultural research stations and NGOs. Capability building should receive priority.
- 7. Mechanisms for information sharing should be strengthened.
- 8. The action plans of focal points should be reviewed from time to time based on data generated.
- 9. Before steps are taken to give legal binding to regulate trans-boundary air pollution, there should be very detailed discussions of data and collecting more data, if needed be.
- 10. The Male process can be taken forward in South Asia only with funding support from UN and other agencies but countries can be persuaded to step up their investments, especially in kind.



#### STAKEHOLDERS MEETING

#### IMPLEMENTATION OF MALÉ DECLARATION ON PREVENTION AND CONTROL OF AIR POLLUTION AND ITS LIKELY TRANSBOUNDARY EFFECTS FOR SOUTH ASIA

#### LIST OF PARTICIPANTS

- Mr. Surendra Shrestha,
   Regional Coordinator,
   UNEP/EAP.AP,
   Asian Institute of Technology,
   P.O. Box 4, Klong Luang, Pathumathani 1210
   Thailand
- Sh. Choudhury Rudra Charan Mohanty, UNEP/EAP.AP, Asian Institute of Technology, P.O. Box 4, Klong Luang, Pathumathani 1210 Thailand
- Mr. Mylvakanam lyngararasan,
   Programme Specialist,
   UNEP/EAP.AP,
   Asian Institute of Technology,
   P.O. Box 4, Klong Luang, Pathumathani 1210
   Thailand
- Mr. Vikrom Mathur Stockholm Environment Institute at York (SEFY), Asian Institute of Technology, P.O. Box 4, Klong Luang, Pathumathani 1210 Thailand
- Sh. Mahboob Elahi,
   Director General,
   South Asia Cooperative Environment Programme (SACEP),
   # 10, Anderson Road, Colombo 5,
   Sri Lanka
- Mr. Pradyumna Kumar Kota,
   Project Coordinator,
   South Asia Cooperative Environment Programme (SACEP),
   # 10, Anderson Road, Colombo 5,
   Sri Lanka

- 7. Sh. Raghunathan Rajamani,
  Ex-Secretary,
  Ministry of Environment & Forests
  (Government of India),
  8-2-585/A/1, Road No.9, Banjara Hills,
  Hyderabad 500034
- 8. Sh. Sagar Dhara, E-303, Highrise Apts., Lower Tank Bund Rd, **Hyderabad – 500 080**
- Sh. J.N. Sinha, Executive Director (EM), National Thermal Power Corporation Ltd., 'NTPC Bhawan', 7, Institutional Area, Lodhi Road, New Delhi – 110 003

Phone No. 011-4361419 Fax No. 011-436 2060 and 4361018

- Sh. Mohit Bhargav,
  Sr. Manager,
  National Thermal Power Corporation Ltd.,
  'NTPC Bhawan',
  7, Institutional Area, Lodhi Road,
  New Delhi 110 003
- 11. Sh. Y.K. Srivastava,
  National Thermal Power Corporation Ltd.,
  'NTPC Bhawan',
  7, Institutional Area, Lodhi Road,
  New Delhi 110 003
- Sh. J. Kumar, Additional Director (EMD), Steel Authority of India Ltd. (SAIL), 'Express Building', 9/10, Bahadur Shah Zafar Marg, New Delhi – 110 002

Phone No. 011-3310236 Fax No. 011-3317375 and 3310236

13. Dr. (Ms.) M. Kakkar, Steel Authority of India Ltd. (SAIL), 'Express Building', 9/10, Bahadur Shah Zafar Marg, New Delhi – 110 002 14. Dr. (Smt.) Manju Mohan,

Associate Professor,

Centre for Atmospheric Sciences,

Indian Institute of Technology (IIT),

Hauz Khas, New Delhi – 110 016

E.Mail: <a href="mmohan6@hotmail.com">mmohan6@hotmail.com</a>

manju@cas.iitd.ernet.in

15. Dr. T.K. Joshi,

Project Director,

Centre for Occupational & Environmental Health,

B.L. Taneja Block,

L.N.J.P. Hospital,

New Delhi

16. Sh. Pranjul Goswami,

Centre for Occupational & Environmental Health,

B.L. Taneja Block,

L.N.J.P. Hospital,

New Delhi

17. Dr. T.S. Panwar,

Tata Energy Research Institute,

Darbari Seth Block, Habitat Place,

Lodi Road.

New Delhi -110 003

18. Sh. Nishant Bhardwaj,

The Development Alternatives Society,

32, Tara Crescent Qutab Institutional Area,

New Delhi - 110 016

19. Dr. K. Vijaya Laxmi,

The Development Alternatives Society,

32, Tara Crescent Qutab Institutional Area,

New Delhi - 110 016

20. Sh. Chandrachur Ghose.

Centre for Science & Environment,

41, Tughlakabad Institutional Area,

New Delhi – 110 062

21. Ms. Rita Roychaudhury,

Federation of Indian Chambers

of Commerce & Industry (FICCI),

'Federation House',

Tansen Marg,

New Delhi – 110 001

22. Sh. Sandeep Srivastava,
 Confederation of Indian Industry (CII),
 23, Institutional Area, Lodhi Road,
 New Delhi – 110 003

Dr. K. Lal,
 Director,
 National Physical Laboratory (NPL),
 Dr. K.S. Krishnan Marg,
 New Delhi – 110 012

24. Sh. Alok Rawat,
Jt. Secretary,
Ministry of Road Transport & Highway
(Govt. of India),
'Transport Bhawan', Parliament Street,
New Delhi – 110 001

- 25. Ms. Nalini Bhatt,
  Director, MoEF, **New Delhi 110 003**
- Dr. (Smt.) Sunita V. Auluck,
   Addl. Director, MoEF, New Delhi 110 003
- 27. Dr. R.N. Gupta, Ex – Director, IMD, B/41C, Gangotri Enclave, Alaknanda, New Delhi – 110 019
- 28. Dr. S.P. Singal, Ex - NPL, Saket, **New Delhi – 110 017**
- 29. Sh. Dilip Biswas,Chairman,Central Pollution Control Board,Delhi 110 032
- Dr. B. Sengupta,
   Member Secretary,
   Central Pollution Control Board,
   Delhi 110 032
- 31. Sh. T. Venugopal,Director,Central Pollution Control Board,Delhi 110 032

32. Dr. S.D. Makhijani,Addl. Director,Central Pollution Control Board,Delhi – 110 032

33. Sh. Lalit Kapur,Sr. Env. Engr.,Central Pollution Control Board,Delhi – 110 032

34. Sh. R.C. Saxena,Sr. Env. Engr.,Central Pollution Control Board,Delhi – 110 032

35. Sh. J.S. Kamyotra,Sr. Env. Engr.,Central Pollution Control Board,Delhi – 110 032

36. Sh. Gurnam Singh,Env. Engr.,Central Pollution Control Board,Delhi – 110 032

37. Dr. S.K. Tyagi
Scientist 'C'
Central Pollution Control Board,
Delhi – 110 032

38. Sh. D.C. Jakhwal,
Project Officer,
Central Pollution Control Board,
Delhi – 110 032

39. Dr. S. Philip,
Scientist 'B',
Central Pollution Control Board,
Delhi – 110 032

40. Dr. R.C. Srivastava
Scientist 'B',
Central Pollution Control Board,
Delhi – 110 032

Sh. M. Satheesh Kumar,
 Sr. Scientific Asstt.,
 Central Pollution Control Board,
 Delhi – 110 032

- 42. Sh. Rajinder Singh, Techn. Supervisor, Central Pollution Control Board, **Delhi – 110 032**
- 43. Sh. Ved Parkash,Techn. Supervisor,Central Pollution Control Board,Delhi 110 032
- 44. Sh. L.K. Kapila, Techn. Supervisor, Central Pollution Control Board, **Delhi – 110 032**
- 45. Sh. Surinder Singh,
  Techn. Supervisor,
  Central Pollution Control Board,
  Delhi 110 032
- 46. Sh. Vinod Kumar Paliwal,Jr. Research Fellow,Central Pollution Control Board,Delhi 110 032