Concept Note of Joint Workshop of PM2.5 source identification

WS Title: Joint workshop on Air Pollution Policy Based on PM2.5 Source Information
- Toward Policy Application and Capacity Building in East Asia -

Date: June 12, 2026 from 13:00 to 15:00 (UTC+7, Bangkok time)

Venue: Onsite and online

1. Background

PM2.5 pollution remains a critical environmental and public health challenge in East Asia due to its complex origins, including biomass burning, urban transportation emissions, and secondary aerosol formation. The high PM2.5 concentrations have significant health impacts and contribute to transboundary air pollution, making regional cooperation essential.

While many East Asian countries have made progress in establishing PM2.5 mass concentration monitoring networks, capacities related to PM2.5 chemical component analysis, PM2.5 source apportionment, and the effective use of PM2.5 source information for policy development remain limited. Moreover. insufficient technical expertise, human resources, and consistent data availability continue to hinder evidence-based air quality management.

The EANET Project in 2026 (EANET 2026-06) aims to promote the standardization of PM2.5 chemical composition measurements and source apportionment methodologies using receptor models, as well as to strengthen capacities of PM2.5 chemical analysis and source apportionment in East Asia. This joint workshop is positioned as an initial step within the project framework, serving as a platform for identifying regional needs, sharing existing knowledge, and exploring pathways to connect scientific findings with air pollution policy.

This workshop will provide opportunities to share experiences and lessons learned from the ongoing SATREPS project (Air-SATREPS), as well as other PM2.5 source apportionment studies conducted in the East Asian region. Through the knowledge and experience exchange, the workshop seeks to enhance synergy and mutual complementarity between Air-SATREPS activities and EANET initiatives.

2. Purpose

The objectives of the workshop are to:

- Review the current status, challenges, and needs related to PM2.5 chemical composition measurement and PM2.5 source apportionment in East Asian countries;
- Discuss PM2.5 analysis approaches that are feasible under limited financial and human

resource, including the use of low-cost sensors (LCS) and simplified analytical techniques;

- Share perspectives on capacity building, methodological standardization, and pathways for policy application of PM2.5 source apportionment, based on experiences from SATREPS and other related research projects.

3.Organizers

ACAP (Asia Center for Air Pollution Research)

Air-SATREPS Project

4. Tentative schedule

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5. Expected Participants

On-site:

- Members of Air-SATREPS project (Institute of Technology of Cambodia, Kanazawa University)
- ACAP representatives
- Policy makers and practitioners from the Ministry of Environment, Cambodia

Online (Zoom webinar (required the registration))

- Researchers conducting PM2.5 source apportionment studies in East Asia
- Representatives from EANET participating countries, including policy officers, QA/QC managers, and technical staffs

7. Contact persons

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8. Draft Agenda

Time/Duration	Agenda
13:00-13:10	Opening Remarks, Introduction ● Ms. Siwaporn Rungsiyanon, Asia Center for Air Pollution Research (ACAP) ● Mr. Ke Vongwatana , Ministry of Environment, Cambodia ● TBD, Air SATREPS Project Introducing the objectives of WS, and the linkage with the EANET Project and Air-SATREPS ● Dr. Keiichi Sato, ACAP
13:10-14:10	**Session 1 Current Status of PM2.5 Monitoring and Source Apportionment in East Asia** Overview of national practices in East Asian countries, including: • PM2.5 monitoring frameworks • Chemical speciation and source apportionment activities • Technical and institutional challenges Presenters: ● Prof. Yongjoo Choi, Hankuk University of Foreign Studies. Republic of Korea ● Prof. Puji Lestari, Bandung Institute of Technology, Indonesia ● Prof. Mylene G. Cayetano, University of the Philippines in Diliman, Philippines Moderator: Dr. Keiichi Sato, ACAP
14:10-14:15	Break
14:15-15:00	**Session 2 Case Study and Panel Discussion** **Case Study: Phnom Penh (Air-SATREPS)** • Practical examples of PM2.5 chemical composition measurement and analysis in Cambodia • Policy applications using PM2.5 source information with a phased and scalable approach • Lessons learned from capacity building and institutional development Presenter: ● Dr. Moly Or Chanmoly, Air-SATREPS Project **Interactive Online Polling**

	• Q1: What is the highest-priority PM2.5 source in your country? • Q2: What data, human resources, and institutions are currently available? • Q3: What are the main barriers to effective PM2.5 pollution control? **Panel Discussion:** Based on the results of the online poll and country-specific situations, the panelists will discuss effective measures for controlling PM2.5 pollution. **<u>Guiding questions in the panel discussion:</u>** Q1 How can countries learn from each other's experiences, as shown in the online polling results, to improve their PM2.5 policies? Q2 How can we connect scientific findings on PM2.5 sources with real government decision-making? Q3 How can each country take step-by-step actions to reduce PM2.5 pollution in ways that match their actual capacity? Panelists: ● Prof. Yongjoo Choi, Hankuk University of Foreign Studies. Republic of Korea ● Prof. Puji Lestari, Bandung Institute of Technology, Indonesia ● Prof. Mylene G. Cayetano, University of the Philippines in Diliman, Philippines ● Dr. Moly Or Chanmoly, Air-SATREPS Project, Cambodia ● Mr. Yim Raksmey, Ministry of Environment, Cambodia Moderator: Dr. Keiichi Sato, ACAP
15:00-15:10	General QA, Summary of the workshop
15:10-15:15	Closing