



PAS-Hg sampling in Chennai, India

GEF Funded WHO-UNEP Workshop on the project 'Developing a Global Monitoring Plan for Exposure to and Environmental Concentration of Mercury'
13 – 14 February 2018
at Rome, Italy

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India

WHY DOES INDIA NEED AMBIENT AIR MERCURY SAMPLING ?

Mercury Exposure & Health Effects – proven facts but updates of various scientific evidences is a national as well as international responsibility. It helps correcting permissible limits in terms of body burden also

Ambient air sampling is less sensitive in terms of ethical norms and sampling complexities

Passive Sampling is cost effective – obviously for long term plan. The only factor that needs to be corrected in the processing of custom clearance when materials are supplied from abroad to India. Capacity building and self execution of a validated PAS measurements are always very important.

WHY DOES INDIA NEED AMBIENT AIR MERCURY SAMPLING ?

Will strengthen HBM – Hg research by providing epidemiological supports

Continuous evidence of existing mercury in air may insist Govt. policy to strengthen alternate energy production and distribution other than thermal power which itself has been proved to be a huge environmental burden. Ambient monitoring is one of the strong supporting parameter

Authentic results may insist govt. policy catalyzing the process of converting policy on mercury **phase down to **phase out** before stipulated time frame as per Minamata Convention**

PAS-Hg regarding

Soon after the completion of our UNEP/WHO training workshop at Ljubljana, Slovenia, the following equipments/materials were sent by Dr. *Alessandra Fino*, *Italian National Research Council, Institute of Atmospheric Pollution Research (CNR-IRA)* with:

- an appropriate passive sampler with specific ID
- one shelter for the passive sampler exposure at open air;
- A guideline with practical instructions on use of passive samplers;
- A short survey on local sources of mercury;
- A short video showing how to use and expose passive samplers;
- Few suggestions for the correct location of the sampling site;
- A schedule to be filled with exact local time of each exposure period.

Supply to Chennai (INDIA) site

Practical instructions and criteria to use mercury Passive Air Samplers (PASs) for air monitoring campaigns together with specific forms like 'Siting Criteria', 'Site Survey' and 'Sampling data sheet'

Took almost one year to start the field work due to some administrative delay, custom clearance issues etc, and ultimately we could manage sampling in two phases:

Received sampler on 28th January

First Phase: started 1st February 2017

Second phase: 13th September 2017

PAS Sampling in India



Sampling data sheet – a sample

Camaign N 1				
Sampling Site Name: Vysarpadi, Chennai				
Code of each passive sampler	Exposure statrts at		Exposure stops at	
	Start date	Exact local time	End date	Exact local time
S2 -A1- 0316	01/02/2017	11.45 am	08/02/2017	11.45 am
S2 -A2- 0316	01/02/2017	11.45 am	08/02/2017	11.45 am
S2 -B1- 0316	01/02/2017	11.45 am	15/02/2017	11.45 am
S2 -B2- 0316	01/02/2017	11.45 am	15/02/2017	11.45 am
S2 -C1- 0316	01/02/2017	11.45 am	22/02/2017	11.45 am
S2 - C2- 0316	01/02/2017	11.45 am	22/02/2017	11.45 am
S2 - Blank1- 0316	01/02/2017	11.45 am	15/03/2017	11.45 am
S2 - Blank2- 0316	01/02/2017	11.45 am	15/03/2017	11.45 am
S2 -A3- 0316	08/02/2017	11.45 am	15/02/2017	11.45 am
S2 -A4- 0316	08/02/2017	11.45 am	15/02/2017	11.45 am
S2 -A5- 0316	15/02/2017	11.45 am	22/02/2017	11.45 am
S2 -A6- 0316	15/02/2017	11.45 am	22/02/2017	11.45 am
S2 -B3- 0316	15/02/2017	11.45 am	01/03/2017	11.45 am
S2 -B4- 0316	15/02/2017	11.45 am	01/03/2017	11.45 am
S2 -A7- 0316	22/02/2017	11.45 am	01/03/2017	11.45 am
S2 -A8- 0316	22/02/2017	11.45 am	01/03/2017	11.45 am
S2 -C3- 0316	22/02/2017	11.45 am	15/03/2017	11.45 am
S2 - C4- 0316	22/02/2017	11.45 am	15/03/2017	11.45 am
S2 - A9- 0316	01/03/2017	11.45 am	08/03/2017	11.45 am
S2 -A10- 0316	01/03/2017	11.45 am	08/03/2017	11.45 am
S2 -B5- 0316	01/03/2017	11.45 am	15/03/2017	11.45 am
S2 -B6- 0316	01/03/2017	11.45 am	15/03/2017	11.45 am
S2 -A11- 0316	08/03/2017	11.45 am	15/03/2017	11.45 am
S2 -A12- 0316	08/03/2017	11.45 am	15/03/2017	11.45 am

PAS INSTALLATION AT CHENNAI, INDIA



RESULTS AWAITED

THANK YOU