

Update on Recent Mercury Monitoring Activities in INDONESIA

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Back Ground of

- Environmental pollutant Monitoring in Indonesia:
Act No. 32/ 2009, regarding to protection and management of environment.
 - Mandates dissemination of information of the quality of the environment to the public (Article 65, paragraph 2: Everyone is entitled to access environmental information, education, access to participation and access to justice in fulfilling the right to good environment and healthy)
 - National Ambient Air Quality Standards published as an appendix in Governmental Decree No.41/1999
 - NAAQS regulated SO₂, NO₂, O₃, CO, particulate matters, Hydrocarbons, Lead
 - Particulate matters AAQS consist of TSP, PM-10 and PM-2.5
 - International cooperation in the framework of:
 - Acid deposition monitoring (EANET)/APEC
 - Heavy Metal component in Ambient Air/ (RCA-IAEA)/Regional Cooperation Agreement)

Mercury Monitoring activities by PUSARPEDAL-Ministry of Environment in Indonesia

- 1. Monitoring of mercury pollutant in the river water (lake), marine water (harbour)**
- 2. Monitoring of mercury pollutant in area of illegal mining: North Sulawesi, West Kalimantan, West Sumatera and Jambi → sampel from sediment, water, fish and moss and hair of worker**

Monitoring Result 2012

I. Sea Water

1. Tanjung Priok Harbour Jakarta: $<0,00005$ mg/L
2. Ciwandan Harbour Banten: $<0.0005 - 0.0014$ mg/L
3. Gorontalo Harbour : $<0,0005 - 0.0007$ mg/L
4. Palu (Sulawesi Southwest) : <0.0005 mg/L



Govent Regulation/Limit: 0.003 mg/L

Continue, monitoring result 2012

II.Lake

1. Rawa Pening Lake/Central Java : <0.0005 mg/L
2. Danau Sentani/Papua : < 0.0005 mg/L
3. Danau Batur/Bali : <0.0005 mg/L

Gavernment regulation/Limit : 0.002 mg/L

III. River mining: <0.0005 mg/L

Readiness Pusarpedal-Ministry of Enviroment in monitoring of mercury pollutant

- Pusarpedal has participated in acid deposition monitoring network (EANET), and has been running for more than 10 years.
- The results of the atmospheric mercury workshops **in Taiwan indicate** that the system of acid deposition monitoring network(EANET) in east Asia which is Indonesia participated will be applied in the monitoring of mercury in atmospheric/ambient air .
- Developing for mercury monitoring sites are also likened to the location of acid deposition monitoring, → **on June, 13, 2013: Joint Committee meeting in Jakarta: Deputy assistant of toxic substances ministry of environment: Inform that mercury monitoring is necessary**

PUSARPEDAL-Ministry Of Environment Laboratorium

- **Now Pusarpedal has Laboratory equipment /instrument for mercury analysis (Hg):**
 - **Atomic Absorption Spectrofotometry (AAS):
Flame and Flameless type**
 - **Inductive Coupled Plasma (ICP)-Mass Spectrometry (MS)**
 - **Mercury Analyzer
(was used for mercury analysis)**
- **Sampling Equipment, and Human Resources
need to prepare**

Work plan 2013-2014

- For the year 2013-2014 the work plan should be prepared, from the readiness of facilities/infrastructure, human resources, budget, etc → Pusarpedal will refer to MOU USEPA and MOE Indonesia through Bureu International Cooperation

Thank you very much for your kind attentions