

Update on APMMN in Indonesia

**Ministry of Environment and Forestry
Republic of Indonesia
2016**

Mercury Monitoring In Indonesia

Mercury monitoring conducted by Environmental Monitoring Center (EMC) 2012-2014

- To know how the total mercury concentration level in water at the several lake and sea in Indonesia (15 lakes & seas priority)
 - Method of mercury analysis: JIS methode (Cold vapour) and measured with Mercury Analyser
- The results showed concentrations of total mercury in water at several lake in Indonesia were below of the method detection limit (MDL < 0,0004 mg/L) and also below the water pollution standard quality in Indonesia PP. No 82 year 2001 (**0,002 mg/L**)
 - The concentrations of Total Hg in sea water in some location detected but still below than sea water standard quality (Ministry decree no 51 year 2004) **0,003 mg/L**.

Mercury Monitoring in ASGM Hotspot

(conducted by MEMR, MoH, MOEF)

No	Location	River Water	Sludge	Clean water	Ambient air	Soil	Biota
		BM: 0,002 mg/L	BM: 0,13 mg/Kg	BM: 0,001 mg/dL	BM: -	BM: 6,6 mg/Kg	BM: 0,40 mg/Kg
1	Province A						
2	Province B						
3	Province C						
4	Province D						
5	Province E						
6	Province F						
7	Province A						
8	Province G						
9	Province H						
10	Province C						
11	Province I						
12	Province J						

Standards:

- River water : Government Regulation No. 82 Year 2001
- Clean Water : Monistry of Health Regulation No. 416 Year 1990
- Biota:
Provisional Standards for Mercury in Fish" (notification for Ministry of Health and Welfare, Japan in July of 1973)
- Sediment:
Canadian Sediment Quality Guidelines for Threshold Effect Level (TEL)
- Soil:
Canadian Soil Quality Guidelines for the Protection of Environment and Human Health (Residential/Parkland)

Status of Network Pilot Sites

- This sampler was first handed over to Pusarpedal (EMC-MOEF), then handed over to Assistant Deputy on Hazardous Substances Management (MOEF)
- On May 2015, EMC handed over the sampler operational to Directorate of Hazardous Substances Management.



Final Installation

The initial phase of the instalation carried out on:

- Date : Monday, June 15, 2015
- Time : 01:32 pm
- Location : On the roof of B Building at the Ministry of Environment and Forestry Office, Kebon Nanas, East Jakarta
- Coordinates : S: 06 ° 13,994' E: 106 ° 52,643'
- Weather conditions : Sunny, Clear sky
- Note:
 - The location is close to several industrial estates (Pulogadung Industrial Estate, Nusantara Berikat Industrial Estate), which is about 10-25 KM.
 - The location is close to the highway
 - The distance to the nearest ASGM area (Pongkor, Bogor) approximately 90-100 KM

Final Installation



Total Hg in Rainwater

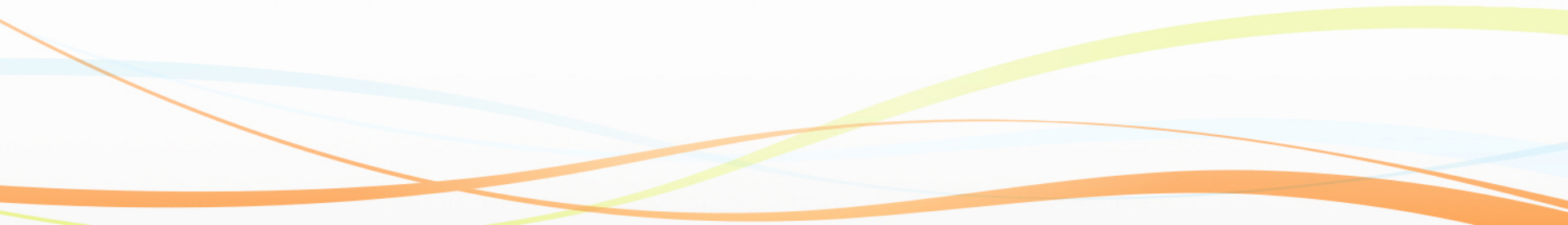


Site	Sample	Date	Hg Conc.
	Label	Analyzed	(ng/L)
Indonesia	05-01-2016	05/25/2016	12,93
Indonesia	12-01-2016	05/25/2016	21,42
Indonesia	26-01-2016	05/25/2016	9,09
Indonesia	02-02-2016	05/25/2016	8,78
Indonesia	09-02-2016	05/25/2016	9,48
Indonesia	08-03-2016	05/25/2016	6,19
Indonesia	15-03-2016	05/25/2016	5,28
Indonesia	29-03-2016	05/25/2016	6,46
Indonesia	05-04-2016	05/25/2016	15,01

Installation and Operation Problems

1. Lack of information when the sampler given to Directorate of Hazardous Substances Management
 2. Sampling activities has not been perfect
 3. Restructurisation in the MoEF caused changes to the duties and functions in some units
 4. The new organizational structure → takes time to coordinate with other units and to adjust the work and budget system's
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Future Plan

- Improve/re-formulate the internal mechanism in operating the sampler
 - Shipping next batch of sample
 - Maintenance
 - Linking the data with other environmental monitoring data
 - Publishing the data
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Thank You...
Khob Khun Krap...
Terima Kasih...

