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Associated Mercury Action Plan for the Philippines


Environmental Management Bureau
Department of Environment and Natural Resources
Philippines

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Background:


- Formation of multi-disciplinary inter-agency Technical Working Group from various government agencies, private sectors, NGOs and academe.
- Consultation workshops in Metro Manila, Davao City, and Legazpi City, Bicol and administration of questionnaires
- Data used in the inventory were obtained from various sources and from estimation through direct or indirect calculation with reasonable assumptions.
- The assumptions and data obtained were based on the calculations for using the maximum and minimum input factors as suggested by UNEP toolkit.



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Situation and Gap Analysis

- The mercury inventory assessment for the Philippines presents an indication of the pattern of emissions and sources of large generators of mercury which could be targeted for control measures.
- Its major drawback however is the wide range of input factors. The toolkit results in about 75 percent increase in maximum values from minimum values.
- This is considered significant and warrants a second look at the toolkit and the country inventory assessment for the Philippines.

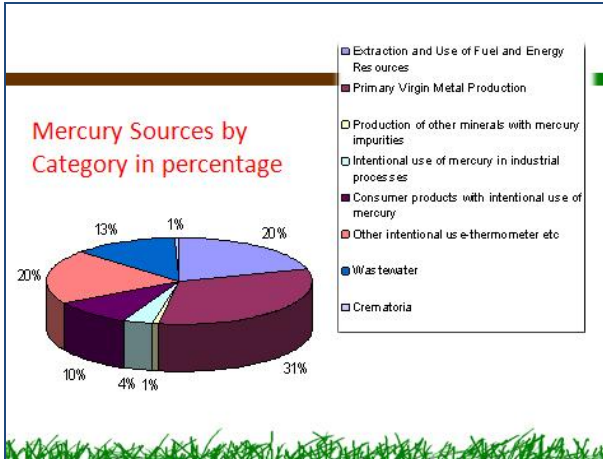


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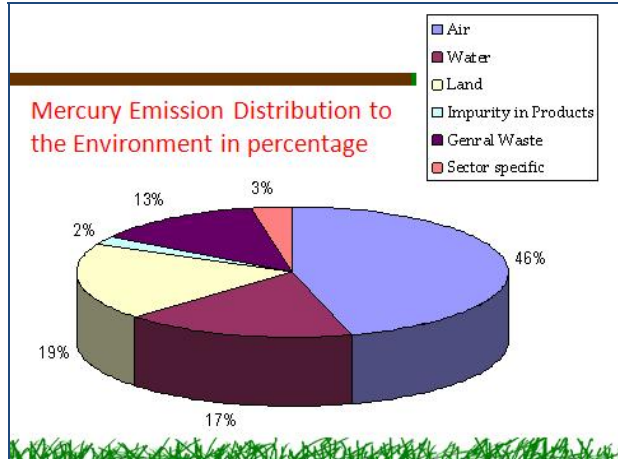
Total Mercury Output or Emissions per Category, kg Hg/year

Category	Emissions kg Hg/year	%
Primary Virgin Metal Production	74,769	31.95
Extraction and Use of Fuel and Energy Resources	47,862	20.45
Other intentional use-thermometer, etc.	46,653	19.93
Wastewater	29,685	12.68
Consumer products with intentional use of mercury	22,717	9.71
Intentional use of mercury in industrial processes	8,400	3.59
Production of other minerals with mercury impurities	2,415	1.03
Crematoria	1,530	0.65
Total	234,031	100

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Goal and Objectives for Developing the Draft Hg Action Plan for the Philippines

- Reduction of risk to human health and contamination of the environment from anthropogenic use and release of mercury and mercury compounds.
- Enhance coordination and cooperation among concerned sectors (e.g. industries, importers, educators, NGOs).
- Intensify source reduction and recycling.
- Improve source emission controls.

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Action Items

1. Establish a national mercury task force;
2. Institute mercury emissions reductions;
3. Undertake source reduction and safe waste management;
4. Perform outreach and education campaigns;
5. Undertake research, analysis and strategic monitoring;
6. Register and dispose mercury stockpiles;
7. Link with international agencies for coordination and cooperation in mercury reduction.

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Action Item 1: Establish a national mercury task force

No	Action Plan	Implementing Agencies	Timeframe
1a	Constitute the national task force on mercury with representatives from various sectors.	DENR, Task Force	2008 Q4
1b	Appoint the Technical Working Group members as advisers to the Task Force. Alternatively, they can be absorbed as part of the Task Force.	DENR	2008 Q4
1c	Conduct a national workshop to develop a Terms of Reference for the Task Force and to review the draft Associated Mercury Action Plan.	DENR, Task Force	2009 Q2
1d	Submit for approval and funding the membership of the Task Force and its TOR.	DENR	2009 Q2
1e	Prepare a detailed Mercury Action Plan.	DENR, Task Force	2009 Q3

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Action Item 2: Institute mercury emissions reductions

No.	Action Plan	Implementing Agencies	Timeframe
2a	Develop a strategy mix of source reduction, waste segregation and emission controls and disseminate it widely.	DENR, Task Force	2010
2b	Encourage more emission monitoring and stack testing of mercury releases.	DENR, Task Force	2009-2015
2c	Encourage emission reduction in individual facilities as soon as possible.	DENR, Task Force	2009-2015
2d	Conduct regular consultation to assess the achievement of mercury reduction in various regions of the country.	DENR, Task Force	2009-2012

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Action Item 3: Undertake source reduction and safe waste management

No.	Action Plan	Implementing Agencies	Timeframe
3a	Impose a total ban on the use of mercury-based sphygmomanometers and thermometers.	DOH	2008 Q4
3b	Impose a ban on the use of mercury in high schools science laboratories.	DENR, DepEd	2009
3c	Provide technical assistance in pollution prevention measures for dental clinics, hospitals, schools, and laboratories.	DENR, DOH	2009-2013
3d	Evaluate the effectiveness of mercury collection and recycling efforts.	DENR	2012-2015
3e	Develop innovative partnerships with energy facilities, mining sectors, industries and institutions to elicit voluntary action for mercury reduction.	DENR (MGB, EMB), DOE, DepEd, DOH, DTI, SEC, BOC	Continuous

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Action Item 4: Perform outreach and education campaigns

No.	Action Plan	Implementing Agencies	Timeframe
4a	Develop posters and brochures on products containing mercury and their alternatives	DENR, Task Force	2009-2010
4b	Develop educational programs for commercial and institutional sectors that generate substantial mercury waste and promote the use of substitutes to mercury products and processes	DENR, Task Force	2009-2010
4c	Develop information and educational campaigns on proper recycling and waste management of items containing mercury compounds.	DENR, Task Force	2008-2009

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Action Item 5: Undertake research, analysis and strategic monitoring			
No.	Action Plan	Implementing Agencies	Timeframe
5a	Improve or refine the mercury inventories by sources, especially from the top 5 categories	DENR	2009-2010
5b	Coordinate the exchange of information to have a national inventory	DENR	2009-2010
5c	Promote the collection of emission test data for large mercury releases and collection and analysis of fish samples	DENR, DOH	Continuous
5d	Use of mercury dispersion modeling to estimate the emission estimates	DENR	2009-2011
5e	Promote research on green chemistry for safer alternatives	DENR	Continuous

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Action Item 6: Register and dispose mercury stockpiles			
No.	Action Plan	Implementing Agencies	Timeframe
6a	Establish a Chemical Safety Information Network	Task Force	2009 Q3
6b	Intensify the registry of mercury stockpiles arising from breakages and substitutions to mercury-free alternatives	DENR DOH Task Force	2009 Q1
6c	Establish a Mercury Reduction Website	DENR	2009 Q1
6d	Develop a plan for the proper storage and disposal of the mercury stockpiles	DENR	2010
6e	Implement the disposal plan in a stage-wise manner based on the priority sectors	DENR	2010-2015

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Action Item 7: Link with international agencies for coordination and cooperation in mercury reduction			
No.	Action Plan	Implementing Agencies	Timeframe
7a	Link with foreign environmental and health agencies with experience on mercury disposal management	DENR DOH	2009-2010
7b	Request technical and financial assistance from multilateral and bilateral agencies for the implementation of the Action Plan	DENR	2009-2010
7c	Participate in forum and meetings on sharing of experiences and technologies	Task Force	2009-2011
7d	Implement the Quick Start Programme for Small Scale and Artisanal Mining	UNEP DENR	2009 Q4