

# Regional Workshop on Chemicals Risk Assessment and Management for Human Health Outcomes Lima, Peru. 2016

## Risk assessment and risk management in a multi sector environment

Jamaica



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# Government Institutions

- The Ministry of Health
  - Standards and Regulation Division
  - Pesticides Control Authority (PCA)
  - National Public Health Laboratory
  - Environmental Unit
  - Government Chemist Department
- National Environment and Planning Agency
- Jamaica Customs Agency
- The Ministry of Economic Growth and Job Creation (MEGJC)

# MEGJC

The MEGJC acts as focal point and coordinator for several Multilateral Environmental Agreements (MEAs) related to Chemicals and Waste Management including the

- Basel Convention
- Stockholm Convention
- Minamata Convention
- Strategic Approach to International Chemicals Management.

# MEGJC Activites

- One recent activity being coordinated by the MEGJC includes the implementation of Jamaica's National Quick Start Programme Trust Fund (QSPTF) Project: *“Strengthening the National Capacity under the framework of the Integrated National Programme for the sound management of chemicals in support of the implementation of the Strategic Approach in Jamaica”*
- This is a multi sectoral, multi stakeholder Project which seeks to enhance the country's technical capacity to manage chemicals in a sound manner. In this regard, the project components are either based on activities outlined as priorities in the *Integrated National Programme for the sound management of chemicals in support of the implementation of the Strategic Approach in Jamaica* and/or through stakeholder consultations

# Mercury Storage and Disposal Project

- This Project utilized Level I of the Inventory Toolkit and has resulted in identification of major sources of mercury and mercury added products in Jamaica.
- The information gathered will assist the country in designing mercury storage and disposal options which are environmentally sound.

# Naturally occurring Mercury

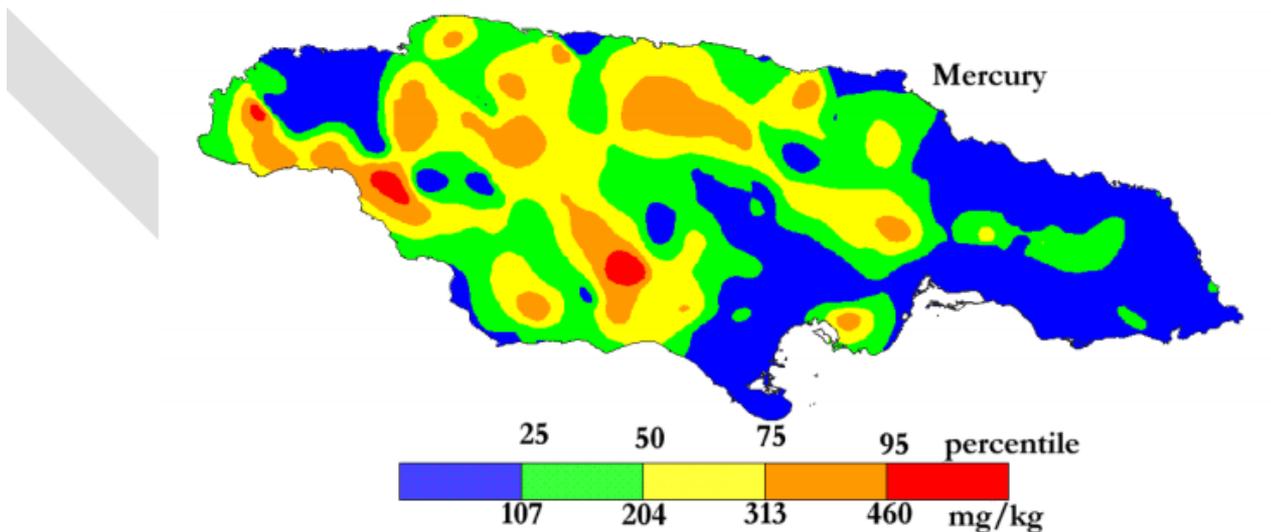


Figure 1. Mercury distribution across Jamaica *Source: ICENS*

# Mercury Inventory

## INVENTORY LEVEL 1 - EXECUTIVE SUMMARY

Source category	Estimated Hg input, Kg Hg/y	Estimated Hg releases, standard estimates, Kg Hg/y							Total releases *3*4*5	Percent of total releases *3*4
		Air	Water	Land	By-products and impurities	General waste	Sector specific waste treatment /disposal			
Coal combustion and other coal use	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0%	
Other fossil fuel and biomass combustion	35.5	35.5	0.0	0.0	0.0	0.0	0.0	35	0%	
Oil and gas production	4.1	1.0	0.0	0.0	0.0	0.0	0.6	2	0%	
Primary metal production (excl. gold production by amalgamation)	4,849.0	727.4	484.9	0.0	0.0	3,151.9	484.9	4,849	10%	
Gold extraction with mercury amalgamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0%	
Other materials production	104.6	78.4	0.0	0.0	26.1	0.0	0.0	105	0%	
Chlor-alkali production with mercury-cells	-	-	-	-	-	-	-	0	0%	
Other production of chemicals and polymers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0%	
Production of products with mercury content*1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0%	
Application, use and disposal of dental amalgam fillings	52.5	1.1	17.4	2.5	1.9	8.8	8.8	41	0%	
Use and disposal of other products	45,142.4	4,484.4	13,489.8	0.0	0.0	27,125.6	42.6	45,142	90%	
Production of recycled metals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0%	
Waste incineration and open waste burning*2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0%	
Waste deposition*2	3,449.0	34.5	0.3	0.0	-	-	-	35	0%	
Informal dumping of general waste *2*3	0.0	0.0	0.0	0.0	-	-	-	0	0%	
Waste water system/treatment *4	157.5	0.0	141.8	0.0	0.0	15.8	0.0	16	0%	
Crematoria and cemeteries	42.4	10.6	0.0	31.8	0.0	0.0	0.0	42	0%	
<b>TOTALS (rounded) *1*2*3*4*5</b>	<b>50,570</b>	<b>5,370</b>	<b>13,990</b>	<b>30</b>	<b>30</b>	<b>30,300</b>	<b>540</b>	<b>50,270</b>	<b>100%</b>	

# Obsolete Pesticides Project

- The PCA is currently completing a project for the disposal of obsolete pesticides in Jamaica.
- There were many sites in the country with obsolete pesticides but no hazardous waste disposal site. An inventory was done to determine the magnitude of the problem.

# Obsolete Pesticides



# Packaging obsolete pesticides for export



# Obsolete Pesticides Project

- The Pesticides Control Authority, Ministry of Health, was the planning and implementing agency.
- The National Environment and Planning Agency (NEPA) guided the PCA in exporting hazardous waste meeting the requirements of the Basel Convention.
- The main stakeholders were
  - the Jamaica Customs Department,
  - pesticide importers,
  - farmers and other users of pesticides
  - Ministry of Agriculture