

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

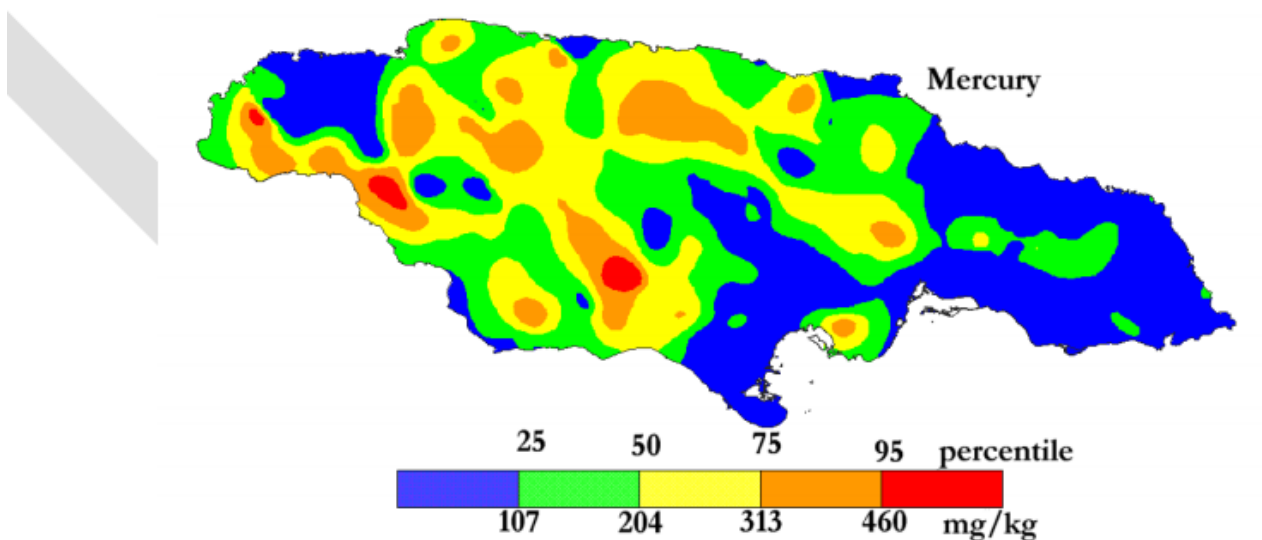


Figure 1. Mercury distribution across Jamaica *Source: ICENS*

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%
TOTALS (rounded) *1*2*3*4*5	50,570	5,370	13,990	30	30	30,300	540	50,270	100%

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