East Africa Sub-regional Workshop on the Establishment of Legal Limits on Lead in Paint (2-3 December 2015)

CASE STUDIES FROM AFRICA:

GROUP 3:

Burundi, Kenya, Rwanda, Uganda and Tanzania

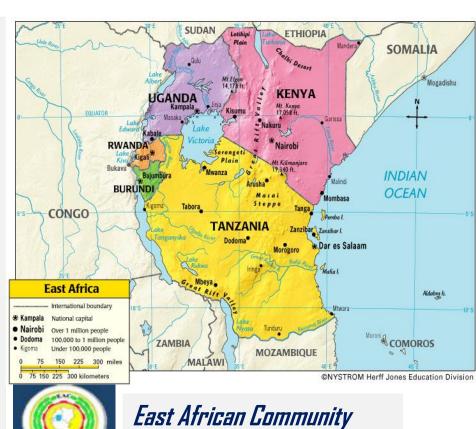






Background Information

- The East African Community (EAC)
 is a regional inter-governmental
 organization of the Republics of
 Burundi, Kenya, Uganda, Rwanda
 and United Republic of Tanzania.
- Kenya is a founding member of the EAC and has the largest economy by GDP in East and Central Africa.
- EAC has a population of 145.5 million and its headquarter is in Arusha, Tanzania.



One People One Destiny

EAC as a trading block

- Harmonizes standards for specific products and services in order to facilitate trade. This has led to increased imports and exports of goods and services.
- Kenya is a major exporter of these products and 4 major Kenyan paint manufacturing companies have branches in Uganda and Tanzania and are currently penetrating to other African Regions.
- Burundu and Rwanda are mainly importers of these products.
- Kenya is therefore a key stakeholder in the manufacturer of paint and allied products within the community that includes automotive, industrial and decorative paints.

Imports of synthetic chemicals for manufacturing of paints in Kenya

YEAR	2008	2009	2010	2011	2012	2013
TONNAGE	7,728	10,301	10,416	10,937	13,107	15,434

Source: Abstract, Kenya National Bureau of statistics (2013)

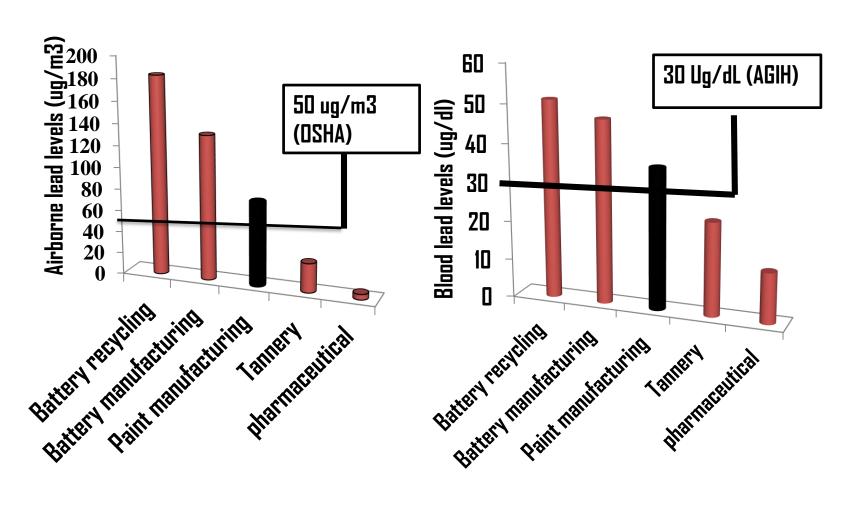
Lead levels in new enamel decorative paints: National paint testing results

Year	Country	No. of samples	Average lead levels (ppm)	Lead levels > 90 ppm	Lead levels > 600 ppm	Lead level > 10,000 samples
2009	Tanzania	20	14,500	100	95	25
2012	Kenya	31	14,900	87	81	39

Note: Paint with no added lead compounds have lead levels of < 90 ppm

Source: UNEP/IPEN (2013) Lead in enamel decorative paint: National paint testing results

Occupational exposure to lead in diverse industrial plants in Nairobi, Kenya (2012 – 2013)

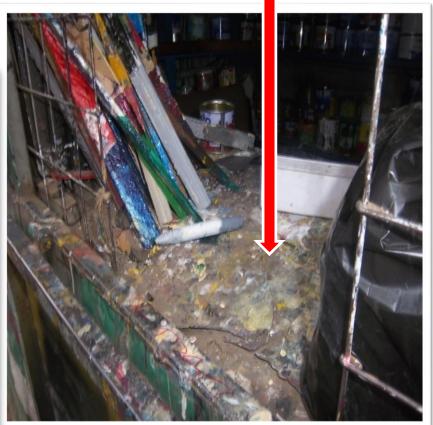


Formulation of lead paint in the informal sector in Kenya through experience (2013)

Previous paint manufacturer formulating paints



Fine particle of lead containing paint



Paint waste disposed in the drainage system

Welding of painted metal surface





Empty paint containers for sale





Consultative forum involving paint manufacturers and suppliers in Kenya (2014)

Participating companies	Number	Use or sale of lead driers and catalysts	Use or sale of lead pigments especially lead chromate	Use or sale of both unleaded and leaded paints	Sale or use of only unleaded paint materials
Lead paint manufacturing company	15	4	13	13	2
Suppliers	8	4	6	7	1

KIRDI: During the International prevention week of action 21st - 27th October 2014

Steps to follow when painting a deteriorated painted surfaces previously painted with lead-based paint to reduce child and worker exposure to lead



Lead levels on the wall surface ranged from 0.5 - 3.57% and exceeded the 0.5% recommended by U.S. DHUD (2012)

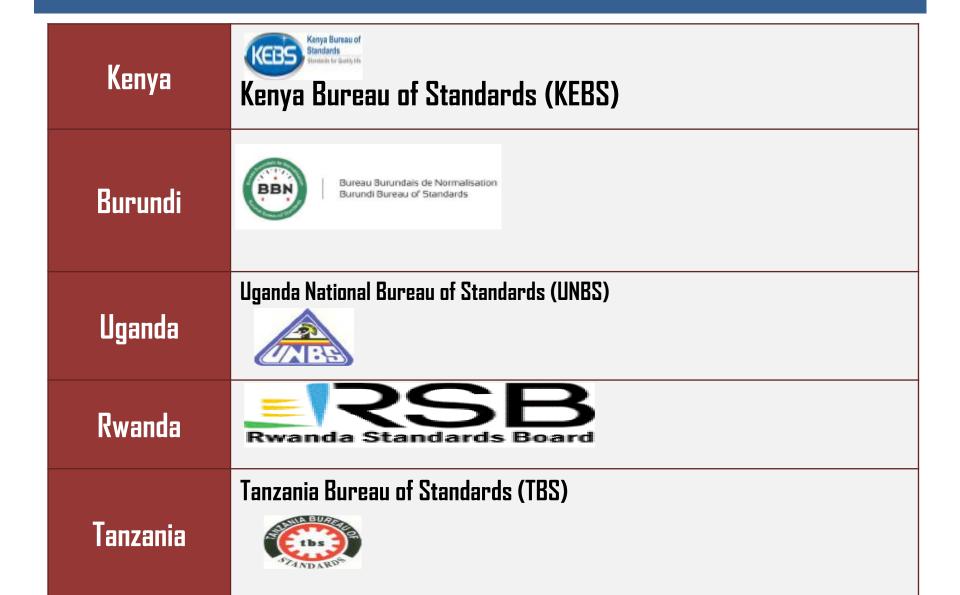
Source: : During the 3rd International Lead Poisoning week of action 27th - 31st October 2015



Government Agencies responsible for chemical management in Kenya

RELATED GOVERNMENT INSTITUTIONS	ROLES			
Kenya Bureau of Standards	Development of standards and dissemination of the standardization information with assistance of technical committee members			
Customs and Exercise Department	Regulates international trade and collects tax revenue for the government.			
Kenya Ports Authority	Manages all the ports of Kenya by enforcing and regulating uses of chemicals			
Kenya Industrial Research and Development Institute	Undertakes research and development in all industrial and allied technologies disseminate research findings that have a positive impact to the national development for policy formulation			
Ministry of Environment, Natural Resources and Regional Development Authorities	Develops national policy framework on environment			
National Environment Management Authority	Coordinates and supervises all environmental issues including chemicals management. They license projects involving chemicals, and transport and incineration as well as disposal of hazardous waste			
Ministry of Health	Provides policy guidelines on human health			
Academia	Conduct related research for formulation of policies and training in related fields			

EAC secretariat responsible for standard development



Technical committee responsible for standard development

- The Standard Bureau in 5 partners' states have technical committees that are responsible for development of EAC standards
- The EAC standards committee provides the secretariat while technical committees' members are nominated from the industry, government agencies, research organizations, universities, private organizations among others to ensure suitable representation and expertise in development of standards
- At the moment, the standards on paints, varnishes and allied products are still under development by the technical committee (EASC/TC/070)

Current lead in paint EAC standard

- In 2014 and 2015, EAC secretariat organized a technical committee meeting to harmonize paints and allied products standards for quality and environmental health concern.
- Among the issues of interest were developing the lead standard with the maximum permissible lead levels in paints of 100 ppm based on the fact that paint manufacturers will not add leaded compounds during manufacturing processes.
- Lead in paint is defined as total concentration as weight % (0.01%)
 of the total non-volatile portion of the products or weight of the
 dried paint (100 ppm).

The Final Draft of East African Standard (FDEAS) 852: 2015 under consideration are:

- 1. Air-dried roofing paint
- 2. Varnishes
- 3. Several decorative paints standards

Other paint standards under consideration for harmonization

The following are some of the Final Draft East Africa Standards (FDEAS):

- 1. FDEAS 848: 2015 Water-thinned priming paints for wood
- 2. FDEAS 849: 2015 Silk (sheen) emulsion paint for interior use
- 3. FDEAS 850: 2015 Matt solvent-borne paint for interior and exterior use
- 4. FDEAS 851: 2015 Matt emulsion paint for interior and exterior use

Conclusion

☐ The case studies indicate that paint is a source of lead exposure. ☐ The adoption of a legally-binding and enforced national regulatory framework creates an even ground for all paint companies. □ Informal sector requires awareness and support as they experience technical challenges. ☐ Labelling and certification of the paint containers is necessary to enable consumers select lead free paint. ☐ The four major paint companies in Kenya are also expanding to other regions of Africa hence establishing legal limit of lead in paint is necessary.

Contact

- Name: Dr. Faridah Hussein Were
- Organization: Kenya Industrial Research and Development Institute
- Address: P.O. Box 30650-00100
- Email: faridares@yahoo.com
- Telephone: +254-733551518