# The Trajectory Ethiopia traverse in dealing with adverse effect of lead in Paints

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#### Introduction

- Toxic effects of lead
- Higher levels of exposure to lead can cause damage to almost all systems in the body
  - poor muscle coordination
  - nerve damage to the sense organs and nerves controlling the body
  - increased blood pressure
  - Kidney problems
  - hearing and vision impairment
  - reproductive problems

# **Lead poisoning**

- "Lead poisoning remains one of the most important environmental health concerns for children globally, and lead paint is a major flashpoint for children's potential lead poisoning."
- "The adverse health effects of lead exposure in children are well described and include intellectual and behavioral deficits, making lead exposure an important public health problem. No safe blood level in children has been identified."

# Lead paint

 Lead is a toxic metal that can be found in paints when a paint manufacturer intentionally adds one or more lead compounds to paints

#### **Lead Paint**

- When lead compounds are used as ingredients (as a pigment and drier) in the manufacture of a paint product, the paint produced is considered to be "lead paint"
- Cognizant of the adverse effect of Lead, Ethiopia has conducted a study (PAN Ethiopia) on lead paints

# Lead paint studies in Ethiopia

# Paint studies

- Two studies were conducted in Ethiopian paints
  - 2013: 23 samples from 8 brands
  - 2015: 36 samples from 9 brands

# **Findings**

- The findings of the sturdy was very alarming
  - A total of twenty-three (23) paints from eight (8) brands were analysed for total lead
  - 20 of the paints tested (87%) had lead concentrations>90
     ppm
  - 19 of the paints tested (83%) had lead concentrations>600 ppm
  - One or more paints from each brand had lead content>600 ppm

#### Cont'ed

- 7 of the paints tested (30%) had extremely high lead content, greater than 10,000 ppm
  - Greater than one hundred times the lead content than would be permitted in the US
- The paint sample with the highest lead content had 130,000 ppm lead
  - 1,400 times greater than would be allowed for use or sale in the US

# 2015 sample (Second batch)

- A total of 36 paints from 9 brands were analysed for total lead
- 28 of the paints tested (78%) had lead concentrations greater than 90 ppm
- One or more paints from eight of the brands, with the exception of one brand, had lead content greater than 10,000 ppm

#### Cont'ed

• The findings coupled with seriousness of the adverse health effect of lead in paints has triggered the formulation of Regulations and Standards on Lead in Paints in Ethiopia

# Activities prior to the formulation of the regulation

- With support from IPEN, GEF/UNEP, PAN-Ethiopia & MEFCC have been engaged in awareness creation and raising and policy framework in the implementing countries.
- Consequently, relevant stakeholders including governmental organizations e.g (MEFCC), paint factories, NGOs and Medias were involved since the project inception in the awareness creation and raising outreach activities.

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- MEFCC has been working in collaboration with PAN-Ethiopia to develop a lead paint regulation.
- With the objective to get inputs from stakeholders and determine the legal limits of lead; MEFCC and PAN-Ethiopia organized a stakeholders' consultation workshop in Adama, Ethiopia.

- A total of 33 participants from different organizations took part in the workshop.
- MEFCC and PAN-Ethiopia covered the expenses of the workshop
- This is an indication of the commitment of the Ethiopian government to eliminate Lead in paints





# **Outcomes of the workshop**

- Given the economic and human health impacts lead poisoning can cause, all the stakeholders agreed that lead paint regulation is imperative
- All the stakeholders (including the paint manufacturers) agreed 90ppm total lead should be the limit
- Special license for the paint factories was debated but finally agreed to be given together with other environmental compliance certificates.

- Two years of grace period was not agreed. (Subject to available stock and market). So, this issue will be discussed with more paint factories to get inputs.
- All the participants agreed that labeling should be mandatory.

# Salient Points of the Regulation

No paint factory will produce, import, distribute, sell and export a paint with lead content more than 90 ppm

The regulation will not be applicable to Paints produced, stored or imported prior to the enactment of regulation

A grace period of two year will be given to existing factories to comply with regulation

 Any existing factory should produce and submit plan of action how to be able to comply with the regulation or produce paint with lead content less than 90 ppm

# Offences Relating to illegal production

- A natural person commits an offence if he produces paints contrary to the provisions of this regulation issued hereunder and is liable, on conviction,
- to a fine of not less than 300,000 Birr (14,000 USD) and not
- more than 500,000 Birr (23,000 USD) or to an imprisonment of not less than five year and not more than ten years or both

# Thank you