Case Study on Lead Paint in Jordan

Eng. Sabrin Qata mish
CHEMICAL SAFETY DIVISION
Environmental Health Directorate
Ministry Of Health
### About Jordan

<table>
<thead>
<tr>
<th>Location:</th>
<th>Area:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan is located in the Middle East</td>
<td>89,342 sq. km</td>
</tr>
</tbody>
</table>

| 10.14 millions Population |

| 97.3% School enrollment primary |

| Jordan has the lowest point on earth, Dead Sea |

| 62.3% Individuals using the Internet |

| Jordan has one of the seven wonders of the world, Petra |

| 3 metric tons CO₂ emissions (per capita) |

| Jordan has a hot, dry climate characterized by long, hot, dry summers and short, cool winters. |
Overview of Paint Industry in Jordan

86
Jordan Chamber of Industry
2018

77
Ministry of Industry and Trade
2019
Number of companies in each paint Sector

- Industrial: 48
- Oil base: 27
- Water base: 43
## Rank of Paint industry within economic sectors

<table>
<thead>
<tr>
<th>Index</th>
<th>Rank within 81 economic sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (gross domestic product)</td>
<td>53</td>
</tr>
<tr>
<td>Gross production</td>
<td>47</td>
</tr>
<tr>
<td>National Export</td>
<td>44</td>
</tr>
</tbody>
</table>
Top Three Industrial sectors using production of Paint industry

- Construction: 46.32%
- Paint industry: 9.44%
- Bricks industry: 5.59%
Jordan’s approach toward banned lead in paint

Legislative Aspect

Control/monitoring Aspect
Jordan’s approach toward banned lead in paint

MOH

Legislative aspect

JSMO

Control aspect
We in Jordan monitor the international developments in regard to the chemicals in all industrial fields including: detergents, paints, packaging, insulating materials and so on, so that Jordan, represented by the Ministry of Health, started in 2005 in cooperation with industrial sector to work on organizing the paints sector in respect to its containment of lead. That was as the following
Legislations issued by Ministry of Health (MOH) regulating lead in paints
<table>
<thead>
<tr>
<th>Year</th>
<th>Legislation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Decree issued in Official Gazette No. (4147) date 16/8/2005 contains a list of banned and restricted chemicals that is proved to cause harm to public health, including lead and its compounds. (which include ban of lead compounds in paints)</td>
<td>According to Public Health Law No. (47) year 2008 and its amendments. (which includes a special chapter for chemicals (ch.9)).</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Legislation</td>
<td>Labeling requirements for the excluded products (industrial paints, car paints, road marking) which permit the use of lead chromate pigments in paint should bear the following warning statements:</td>
<td></td>
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<tr>
<td>------</td>
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<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| 2008 | MOH gave exceptions for local industries to import and use lead chromate pigments (P.Y 34, PR104) in industrial paints, car paints, and road marking till the end of 2012 pending for the issuance of local or global legislations or alternative are available globally. | • **DANGER CONTAINS LEAD.**  
• **KEEP OUT OF REACH OF CHILDREN.**  
• **Do not apply on toys and other children's articles, furniture, interior or exterior surfaces of any dwelling or facility which may be occupied or used or commonly exposed by children.** |
<table>
<thead>
<tr>
<th>Year</th>
<th>Legislation</th>
<th>Allowable percentage of lead as impurity in household paints 0.06% by weight (600 ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Decree issued in Official Gazette No. (5187) date 14/11/2012 amending decree (4147).</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>The exception <strong>which was given in 2008</strong> was extended till the end of 2017 for industrial paints, car paints and road marking with the same labeling requirements</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Legislation</td>
<td>Legislation Details</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>2018</td>
<td>Decree issued in Official Gazette No. (5503) date 1/3/2018. <strong>The decree is in force</strong></td>
<td>Reducing allowable percentage from 0.06% to 0.009% by weight in household paints (<em>600 ppm to 90 ppm</em>)</td>
</tr>
<tr>
<td>2018</td>
<td>The exception was extended again till the end of 2022 for industrial paints, car paints and road marking with the same labeling requirements</td>
<td>but <strong>Curbstone paints</strong> which were considered to be as part of road marking were excluded from this exception</td>
</tr>
</tbody>
</table>
Penalties article of the Health Law

Chapter XV (15) of the Public Health Law No. 47/2008

Article penalties

Article 26:

Taking into account the magnitude of the health damage and the frequency of the violation and any more severe penalties mentioned in this legislation:

1. The following shall be punishable by imprisonment for a period of not less than four months and not more than three years or a fine (Financial penalty) of not less than five thousand dinars and not more than ten thousand dinars or in both of these penalties:

- Causing damage to public health caused by (mishandling of chemicals) poor circulation of chemicals
The Legislations and decisions issued by the MOH regarding the lead in the paints were reflected in the following Jordanian Standards for paints.
<table>
<thead>
<tr>
<th>JS Standard</th>
<th>Lead content in ppm of total paint weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS 31:2010 paints and varnish-water paints (emulsion).</td>
<td></td>
</tr>
<tr>
<td>JS 1035:2010 paints and varnish-flat alkyd based paints for interior and exterior use.</td>
<td>600 ppm</td>
</tr>
<tr>
<td>JS 1036:2010 paints and varnish-alkyd based undercoating paints for general purposes</td>
<td></td>
</tr>
<tr>
<td>JS Standard</td>
<td>Lead content in ppm of total paint weight</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>JS 1139:2010 paints and varnish-air drying semigloss paints for general purposes</td>
<td></td>
</tr>
<tr>
<td>JS 244:2010 paints and varnish-air drying gloss paints for general purposes.</td>
<td>600 ppm</td>
</tr>
</tbody>
</table>

for the last decree(5503) year 2018, which determines the allowable percentage of lead as impurity in household paints to be 0.009% (90 ppm), is still in the draft stage to be reflected in the Jordan Standards and Metrology Organization (JSMO) by the end of 2019, but again even if the standard is in draft stage the decree is in force.
Other relevant laws

Environmental Protection Law No. 52 of 2006
Import and export law
Customer protection law
National production protection law
Customs Law
Jordan's approach toward banned lead in paint

Legislative aspect

Control/monitoring Aspect

MOH

JSMO
MOH through the Division of Chemical Safety in the Directorate of Environmental Health, has many procedures on controlling and inspection of lead and its compound in paints through:
Chemicals import control

Restricted Chemicals Database

Inspection visits
Chemicals import control by controlling raw materials that used in manufacturing paints, imported paints through the completion of customs transactions.
register the restricted chemicals (including lead and its compound) imported to Jordan to follow their handling and uses in Jordan.
Inspection visits

To local paint factories and import companies to:

- ensure safe handling of chemicals throughout the whole process (importation, transportation, storage, use).
- taking samples of local and imported household paints for testing to ensure that they are complying with the regulations.
- ensure the existence of the warning statements that should be placed on the label of car paints, roads, and industrial paints.
- raising awareness of lead hazard during inspection on factories manufacturing lead containing paints.
Summary of MOH control and inspection role

2008-2018
No. of factories and imported companies inspected (2008-2017)

- No. of Facilities Inspected: (169)
  - No. of Factories Inspected: (120)
    - No. of violating factories: (11)
  - No. of Importing Companies Inspected: (49)
    - No. of violating companies: (2)
No of samples collected since 2008 till 2017

Samples of paints collected (208)

- Household Paints (Local) (104)
- Household Paints (Imported) (74)
- Car, Industrial Paints, Road Marking, Talc, Drier, Alkyd, Pigment, wood paints, and Varnish (30)
Results of tests for Household Paints (178 sample)

- $X > 600$ PPM
  - No. of Sample (34)
  - Percentage = 19%

- $90$ PPM > $X$ < $600$ PPM
  - No. of Sample (7)
  - Percentage = 4%

- $X < 90$ PPM
  - No. of Sample (137)
  - Percentage = 77%
Ministry of Health is, and will continue, following up any amendments or updates in this regard for the protection of public health
JSMO also has a control role through monitoring the implementation of its Standards.
Finally Summery of the project to gradually phase out lead in paint  
(Royal Scientific Society and UN-environment)
Summery of the project to gradually phase out lead in paint

**Brief**
This project is part of a GEF-supported project under the title of Global best practices on emerging chemicals policy issues of concern.

**Partners**
- UN- Environment
- SAICM
- World Health Organization (WHO)
- US Environmental Protection Agency (EPA)
- IPEN, which is a Swedish NGO, specialized in paint studies

**Objectives**
- Raise Awareness & Create Momentum
- Support the Industry
Summary of the project to gradually phase out lead in paint

**Activities/steps**
1. National baseline assessment
2. Launching of Technical guidance
3. Awareness Raising & Communication
4. Adaptation to National Context
5. Pilot Demonstration
6. Advocacy with National Government

**Project approach**
The project aims to support paint companies to produce paints with the **targeted limits of lead** and at **acceptable financial costs** that enhance the competitiveness of companies.

**Target**
Four national companies will be selected to provide technical support to them, guided by the technical support manual prepared by paint experts in the European Union.

Since the signing of the project was new so far we have not obtained final and certified results to be presented to you now.
Thank you