

LEAD-IN-PAINT CASE OF STUDY - URUGUAY



MINISTERIO DE RELACIONES EXTERIORES

REPÚBLICA ORIENTAL DEL URUGUAY

Uruguay is a developing country of South America, bordered by Argentina to its west and Brazil to its north and east, and with the Atlantic Ocean to the south and southeast.

It is home to 3.3 million people, half of whom live in its main city, Montevideo.

Among other characteristics can be named its political and social stability, quality of living and growing economy.

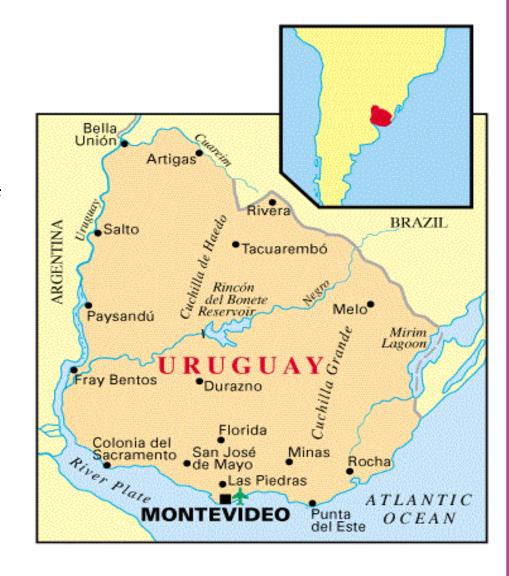
Capital: Montevideo

Total Área: 176,215 km²

Population: 3,324,460 (2013 census)

Frontiers: Argentina, Brazil and the

Atlantic Ocean.



Although lead contamination was never considered as a public health problem, in 2000 and 2001 it suddenly became a topic of major impact; because of the La Teja poisoning episode.



Particular case:

A six-year-old boy living in western Montevideo, in the working class neighborhood of La Teja, suffered from years of puzzling health problems such as anemia, bone and joint pain and severe migraines. Unable to establish a clear diagnosis, a pediatrician from a local health clinic conducted x-bone rays and discovered the presence of lead. Follow-up, blood tests in August 2000 confirmed the child had lead poisoning.

By October 2000 the word had spread to the family's neighbors, who started recognizing the same symptoms in their own children and suspecting that the source was most likely an environmental one.

To sum up, many cases of chronic poisoning in children appeared, prompting corrective responses from Health and Environmental authorities. Citizens demanded public disclosure of information concerning lead pollution and wanted action to address the contaminated Uruguayan sites.

In response, the Ministry of Health assembled an inter-institutional multidisciplinary committee, with delegates from health, environment, labor, education, and social security authorities, as well as private actors, nongovernmental organizations (NGOs) and the University.

Sources were multi-factorial:

To begin with, la Teja was an industrial neighborhood, where the factories didn't apply the required waste treatments.

This neighborhood presents uneven areas and during the 2000 economic crises illegal settlements established there, using the scrap and smelter solid wastes to fill-up the gaps on the land (which easily flooded). This fact ends up affecting the soil and water sources. Also, many people work (informally) in the metal recycling chain.

This case creates an alert status and was the first impulse for the consideration of the issue, motivating several studies and the further development of regulation.

In general in the country the major sources of lead contamination, were similar to those in other developing countries, resulting from metallurgical industries, lead-acid battery processing, lead wire and pipe factories, metal foundries, metal recyclers, leaded gasoline (before December 2003), lead water pipes in old houses, scrap and smelter solid wastes, (among others), and little or no regulation and control regarding paints and objects managed by children, such as toys.

2001 - The Ministry of Health discovered 4409 of lead poisoning in La Teja (only 402 were adults).

- ➤ 1861 (42%) lead in blood under 10 micrograms per decilitre
- 1694 (38%) lead in blood between 10 14 μg/dl
- > 596 (14%) lead in blood between 15 19 μg/dl
- 248 (6%) lead in blood between 20-44 μg/dl
- > 7 cases with values above 45 μg/dl

Being normal amounts: adults less than 10 $\,\mu g/dl$ of lead in the blood / children less than 5 micro $\,\mu g/dl$ of lead in the blood

Legal Framework in Uruguay (Towards the legislation of lead in paint).

- ➤ Article 47 of the Constitution, states that the protection of the environment is in the general interest. Persons must abstain from any act that causes severe depredation, destruction or contamination of the environment.
- \triangleright Environmental Law 17.883, approved in January 1st, 2000, refers to the general protection of the environment.
- ➤ Law N° 17.775 "Prevention and control of occupational exposition to lead contamination", approved on May 20th, 2004.
- ➤ **Decree 069/2011** "Lead content in Paint", approved on February 15th, 2011
- > Resolution of the Environmental Directorate 190/2011 "Labeling".

Legal Framework in Uruguay (Towards the legislation of lead in paint). - Law Nº 17.775 - 20.05.2004

This law addresses the lead contamination in general, but among others it establishes regulations and controls to be applied to lead in paint:

- Lead-bearing paints cannot contain more than the maximum lead level allowed by a future ruling.
- Containers with leaded products must carry a label in Spanish, which must indicate the lead content and provide precautionary directions for use.
- ➤ Lead is banned from toys and other products used directly and frequently by children and adolescents.
- ➤ All lead-containing products must be clearly labelled, including the percentage of lead content.
- ➤ A national register must be kept for all lead processing industries and commercial lead-containing products, and must include information on their origin, storage, transit, and destination of such products.

Paints can contain a maximum lead level of **600 ppm*** (six hundred parts per million), determined on a dry basis or by total non-volatile content for the following products.

It applies to:

Architectural paints (also called decorative or household use), varnishes and similar surface coating materials, which have been pre conditioned, tinted or prepared by the manufacturer, including the colours prepared in outlets with original manufacturer's products

Paints for children use as tempera, watercolours and related products

Graphic inks and masterbatches

*The number 600 ppm was reached through an agreement with the private sectors, NGOs and governmental authorities focus on the international standards and considering the actual possibilities of our industry.

Exempted Products:

- 1.- Agricultural and industrial equipments.
- 2.- Industrial, agricultural and commercial metallic structures.
- 3.- Bridges and port works.
- 4.- Traffic and safety marking coatings
- 5.- Motor vehicles, planes, ships and trains.
- 6.- Maintenance, restoration of works of art, antiques, buildings and other pieces with historical or artistic value.

Through the Decree, the following is stated:

- 1.- The prohibition of manufacture and importation of products made with a higher level of lead than 600 ppm.
- 2.- The forbiddance of <u>commercialization</u> of products within the scope of the prohibition.
- 3.-The compulsory registration of factories and importers of paints, varnishes, inks and masterbatches.
- 4. Mandatory Affidavit of factories and importers of paints, varnishes, inks and masterbatches.
- 5.- The compliance with labeling obligations for paints, varnishes, inks and masterbatches to be sold in the country, according to the content and format established by Resolution of the National Environment Directorate.

National Register:

The Registration form must be sent to the Environmental Directorate printed and signed by the owner, legal representative or attorney-in-fact of the company, and must be presented along with a notarial certificate attesting the status and legal representation that is invoked; and must be sent to the email pinturas.plomo@mvotma.gub.uy in excel format.

This record includes:

→ An Affidavit Form enclosing certificates of analysis for lead and laboratory accreditation in the case of foreign products.

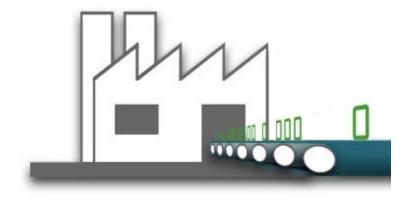
- **→ Sampling**. A proposal for analytical sampling for lead content, with design criteria and methods to be used, which must be approved by the National Environment Directorate (DINAMA).
- → Analysis. The analytical studies shall be performed by laboratories with internationally validated methodologies. National laboratories should have accredited parameters or have a certification of its management system quality and quality control system that can demonstrate technical proficiency to the Environment Directorate (DINAMA).

Analysis by the manufacturers will be accepted, if they have the specifications detailed above. In case of foreign laboratories, they must have the tests by a body accredited internationally recognized and the results must be submitted with the certificates so guarantee.

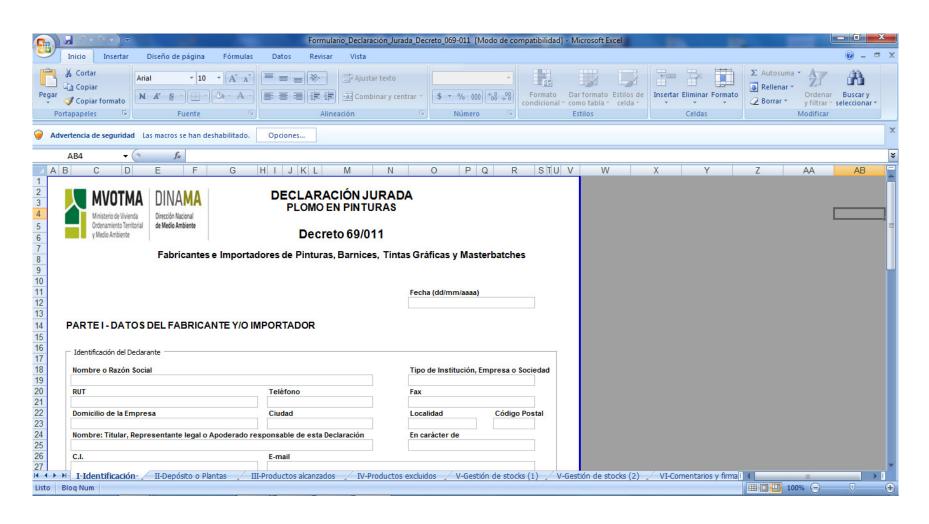
→ Stocks return strategy. In case the company has stocks under the prohibition that do not meet the specification for lead, it must redeem such stocks with their respective manufacturers or importers.

Manufacturers and importers will be required at their own expense, to assist in the dissemination and implementation of this regulation, and to receive and redeem stocks to proceed to their final disposal. To this end, they must submit for approval to the National Environment Directorate together with a first affidavit, a proposed management stock plan.

The activities in each management plan must be executed within a maximum period of 2 years from the approval of the Decree, without prejudice to the application of other existing environmental standards.



▶ Information update. Such Affidavit should be updated every three years before March, 30th or in case of changes in the formulation, introduction of new products or elimination of others.



Through the Decree, the following is also stated:

Labeling. The commercialization in Uruguay of products within the scope of the prohibition, may be made only in compliance with the labeling requirement which refers to Article 6 of Law No. 17.775, of May 20, 2004.

The National Directorate of Environment may establish the content and format of labeling. In the case of imported products, for which packaging do not comply to such obligation, they shall bear an additional label for the purpose of commercialization.

Compliance with the labeling requirements to which this article refers shall be borne by the manufacturer or importer of the product.

Advisory Commission. The Ministry of Housing, Land Planning and Environment established an advisory committee, in order to implement the regulations and to develop a plan for the reduction and replacement of lead, (among other hazardous substances), as a content of paints and varnishes: This Committee consisted of representatives of the Ministry of Housing, Land Planning and Environment, the Ministry of Industry, Energy and Mining and public and private entities related and organized for that purpose.

Other actions. Manufacturers and importers, with the support of the Advisory Commission, promote actions to decrease the lead content beyond the maximum limit set forth in the Decree.

Controller. The Ministry of Housing, Land Planning and Environment, through the National Directorate of Environment, shall control de compliance with this decree.

Default and sanctions. The Ministry of Housing, Land Planning and Environment have the authority to impose the penalties listed below for failing to comply the following:

- a) Affect or damage to the environment, including human health, due to improper handling or disposal of paintings within the scope of the prohibition referred to in Article 1 of this decree.
- b) Import, manufacture, distribute, or sell products within the scope of the prohibition.
- c) Failure to comply with the registration requirements.
- d) Failure to comply with the labeling requirements.
- e) Submitting false information to the Administration.
- f) Obstructing the work of the Controller of the National Environment Directorate.

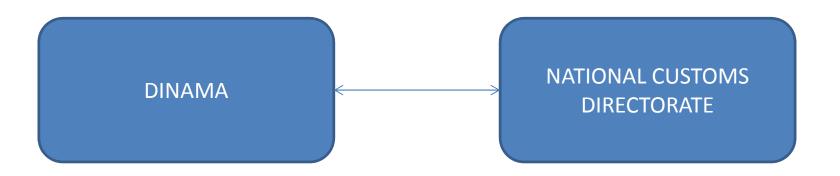
Other defaults are considered minor and will graduate in the degree of departure from the obligations under this decree and administrative history of responsible involved. The repetition of defaults considered minor shall be considered as serious.

Fines. The fines to be imposed by the Ministry of Housing, Land Planning and Environment shall be applied as follows:

- a) considered to be minor infractions involving only administrative failures, 10 UR (ten indexed units) to UR 1000 (one thousand indexed units) aprox USD 600 to 60.000
- b) Default considered mild but whose consequences can go beyond a mere administrative failure, UR 100 (one hundred indexed units) and UR 2000 (two thousand Indexed units). aprox USD 6.000 to 120.000
- c) Defaults considered serious UR 500 (five hundred indexed units) and UR 7000 (seven thousand Indexed units). aprox USD 30.000 to 420.000

The amount of the fine will be established in each particular case, depending on the magnitude of the offense and its environmental consequences, as well as the background of the offender.

Legal Framework in Uruguay - Importation



Since January 2012, the National Customs Directorate (DNA) and the National Environment Directorate (DINAMA), began monitoring the registration of importers of paints, varnishes, inks and masterbatches, being a prerequisite to present the Single Customs Document (SCD), to be registered at the National Registered with DINAMA.

- 1. The company should be registered in DINAMA.
- 2. To get autorization to import, the company should file an affidavit for each importation.
- 3. DINAMA will register the authorization for import, through the on line Custom System (Lucia). Identifying Number of the import documents & term.
- 4. At the moment of granting the Custom Document, the system will check the registration and correspondent authorization

Legal Framework in Uruguay –Labelling DINAMA RESOLUTION 190/2011

All lead-containing products must be clearly labelled.

The label could be printed, stamped, affixed, etc.

It should be placed in a visible spot and written in Spanish language with clear, indelible, and legible characters, (easily understandable for the consumers, not being allowed the use of symbols).

Precautionary directions for use should be provided.

In any case producers and importers could express the lead content in ppm using ranges, according to a proposal that should be approved by the Environment Directorate and filled along with the National Register form.

For the products within the scope of the prohibition, wich fulfilled all the requirements stated by the Decree 069/2011

Label should state:

THIS PRODUCT COMPLIES WITH
ARTICLE 1 OF THE DECREE 069/2011 –
(This means a lead level under 600 ppm)

For the exempted products:

Label should state:

LEAD CONTENT "XXX" PPM - DECREE 069/2011

MAIN FACTORS THAT CONTRIBUTED TO THE EFFECTIVENESS OF THE LEGISLATION

Legislation was developed, upon an important "national" crisis that was proven to have been avoidable with measures that didn't require major investment or costs for the government. This led to the development of factors that contributed to an effective approach:

<u>General awareness</u>: the situation stimulated a general debate creating a great degree of awareness on the issue.

<u>Active society and NGOs</u> (informed and committed) undertaking an important role by demanding solutions from the Government.

General measures in order to raise awareness about the contamination problem:

Exchanging information on the effects of lead poisoning on health.

Teaching children in schools about the ways of contamination and effects of the poisoning with lead.

Conducting national workshops on the issue.

Exchanging information on pathways of exposure to lead paint for children and adults.

<u>Capacity building and governmental coordination</u>: the creation of an Inter-Institutional Committee on the issue with participation of all the involved parties (specially Environment, Industry and Health Ministries).

The <u>active collaboration of the private sector</u> (Paint producers association), that walk along with the government in all the process.

RESULTS

As a part of its support for The Global Alliance to Eliminate Lead Paint (GAELP), the United Nations Environment Programme (UNEP) provided funds to the global NGO network, IPEN, during 2012, to sample and test the lead content of enamel decorative paints on the market in nine regionally and linguistically diverse developing countries and countries with economies in transition where no current data on lead in paint appears to be available. To carry this out, IPEN formed partnerships with NGOs in Argentina, Azerbaijan, Chile, Cote d'Ivoire, Ethiopia, Ghana, Kyrgyzstan, Tunisia, and Uruguay.

In two of the nine countries, Chile and Uruguay, all the enamel decorative paints tested had low total lead concentrations. In case of Uruguay a maximum of 63 ppm was founded.

This investigation was led in Uruguay by the NGO Pesticide Action Network Uruguay (RAPAL Uruguay).

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THANK YOU