

SAICM/UCT Lead in Paint (LiP) Community of Practice

Discussion Forum

Title	“Transitioning to paints without added lead: guidance and experience in reformulation”
Date	25th May 2022
Time	14:00 – 15:30 (GMT+2)
Facilitator	Andrea Rother, Univ. of Cape Town
Presenter	Branko Dunjic, NCPC Serbia Samuel Felisario, Rajawali Hiyoto, Paint SME in Indonesia Marcos Alegre, NCPC Peru Husam Alkilany, NCPC Jordan
WebEx Registration link	Register for this discussion by clicking the following link: https://unep.webex.com/unep/j.php?RGID=r0ce061eab475afce73beb7c3b9fa9598

NOTE:

- ✓ Since this is a discussion, we encourage you to **prepare** or at least think about the questions prior to joining.
- ✓ **This guide** lays out the background to the questions, presents the questions and provides resources if you should wish to read further on the issue.



- **Details for joining this discussion are below.** To participate in this discussion you will need to have signed up in advance at: www.saicmknowledge.org/community
- For **technical assistance** on the day of the discussion go to the LiP CoP WhatsApp group: <https://chat.whatsapp.com/HOMtpqf5YG6EX53gJ6jsTR>
- **Connect** with laptops/PCs rather than phones since the discussion is about typing.
- Should you **NOT be able to join the discussion** but still wish to contribute please **click the link below** and fill out the Form with your **contributions**:
<https://forms.office.com/r/tmfeMjbFhy>

PRESENTER BIOSKETCH



Dr Branko Dunjic is managing Cleaner Production Centre in Serbia, established in the frame of a UNIDO-sponsored project since 2007. He has published over 40 scientific papers and he is the co-author of 4 patents.



Sammy Felisario is a licensed chemical engineer. Had been in several organisations including Sadolin (Akzo Nobel) before joining Rajawali Hiyoto (an Indonesian paint SME) as R&D Manager and Technical Adviser.



Husam Alkilany is a Manager of Environmental Studies at the Royal Scientific Society of Jordan and a Senior Specialist within the Cleaner Production Unit. He holds a MSc degree in Water Resources and Environmental Engineering. Mr. Alkilany has experiences in different environmental areas including chemical management, cleaner production, and environmental impact assessment. He has worked for national and international companies and coordinated and managed project at national level



Marcos Alegre is a Sanitary Engineer with a Master of Science in Water and Environmental Management from Loughborough University, UK. Mr. Alegre is the former President of the Global Network for Resource Efficiency and Cleaner Production (RECPnet) and Vice Ministry of Environmental Management of the Ministry of the Environment. Currently, he holds the position of Senior Specialist in RECP of the Peruvian National Cleaner Production Centre operated by Grupo GEA in Perú.

DISCUSSION INTRODUCTION - Branko Dunjic, NCPC Serbia

This Lead in Paint Community of Practice (LiP CoP) discussion builds on the June 2021 LiP CoP Discussion, "[Reformulation is entirely possible](#)" by providing guidance and insights on paint reformulation based on the experiences of different practitioners.

To support the reformulation effort, the United Nations Environment Programme (UNEP), and the National Cleaner Production Centre from Serbia (NCPC Serbia) have jointly developed [Lead Paint Reformulation Technical Guidelines](#) (hereafter referred to as “the guidelines”). The guidelines address both logistical and economic capacity constraints and technical barriers to the substitution of lead compounds in paint, focusing on the needs of small- and medium-sized enterprises (SMEs) for the effective and efficient reformulation of paint. The guidelines were tested for more than two years in lead paint reformulation pilot demonstrations in selected SMEs in seven countries: China, Colombia, Ecuador, Indonesia, Jordan, Nigeria, and Peru.

The Strategic Approach to International Chemicals Management (SAICM) Global Environment Facility (GEF) project partners (NCPC China, NCPC Colombia, NCPC Ecuador, NCPC Jordan, NCPC Peru, the International Pollutants Elimination Network partner organizations Nexus 3 Foundation in Indonesia and Sustainable Research and Action for Environmental Development in Nigeria) worked with selected pilot SMEs to demonstrate replacing lead compounds with non-lead alternatives. SMEs volunteered to participate in the pilot demonstrations. Today, **22 SMEs** have already completed pilot demonstrations highlighting both the feasibility of reformulation and the usefulness of the guidelines. More than 10 additional SMEs are in the process of reformulating. The guidelines were finalized, incorporating the SMEs' experiences and feedback received from stakeholders, and are now available in all UN languages. “**Reformulation is Entirely Possible: Summary of the Lead Paint Reformulation Technical Guidelines and How to Use this Information**” is a summary of the technical guidelines and is [available](#) in all UN languages. The summary highlights key messages from the guidelines that are targeted to policymakers, industry, and civil society organisations.

The guidelines and the summary provide a helpful **starting point** for all stakeholders wishing to learn more about **best practices in lead paint reformulation**, but they cannot cover every single iteration, as there are many different formulations which use lead for colour and other paint properties. They provide general information on paint reformulation processes, a step-by-step approach on how to do reformulation, where to find relevant information such as alternative raw materials, some examples of specific alternative pigment formulations, and additional details such as standards for paint performance testing. In-depth analyses and more specific data from pilot demonstrations were provided through the SAICM GEF project to participating companies and are described in case studies in the Appendix of the guidelines.

The present discussion will focus on guidance and experience in transitioning to paints without added lead and will look more in detail at the **key elements of successful reformulation (question 1)**. **Collaboration and exchange of information between government and industry stakeholders** are also key to facilitating paint reformulation and the adoption of a lead paint law (question 2). Finally, the discussion will touch upon what needs to be done to **scale up the production of paint without added lead** (e.g., make enough for the market) (**question 3**).

Resources:

- [Reformulation is Entirely Possible: Summary of the Lead Paint Reformulation Technical Guidelines and How to Use this Information](#)

- [Project results in China, Jordan, Peru, Nigeria and Colombia – April 2021](#)

We encourage you to think about the poll questions before the discussion so you can contribute your responses:

Introductory poll: *What type of organization do you represent?*

- National Government
- Local Government/authority
- Paint industry (company or association)
- Paint ingredient supplier
- Academic institution
- Health care institution
- Poison centre
- Professional association
- Civil society non-profit organization
- Intergovernmental organization (IGO)
- Industry
- Laboratory (commercial or government)
- Laboratory accreditation organization
- Other (please specify in chat)

QUESTION 1 (14h05 GMT+2) – Sammy Felisario, Rajawali Hiyoto - Paint SME in Indonesia

Background:

Companies around the world are undertaking paint reformulation efforts and are shifting their production to paint without added lead. Many factors can contribute to supporting and advancing these efforts. During the SAICM GEF project, it was noted that often a combination of factors and demands from different stakeholders enable efficient and effective paint reformulation.

For some companies, awareness-raising efforts by NGOs on the health and environmental impacts of lead paint convinced senior management to initiate efforts to reformulate lead paint. Other companies indicated that soon-to-be adopted lead paint laws were an important reason to continue reformulation, despite technical difficulties encountered, to have a comparative advantage on the market once the law was passed. Technical support and exchange with alternative pigment providers ensured a smoother reformulation process in some companies that were able to learn from these providers to build their technical capacities.

Some elements of successful paint reformulation are specific to the paint industry or a particular country. However, some key factors supporting reformulation seem universal. For example, governments can support reformulation by setting effective dates for requirements in a lead paint law and as needed, longer dates for phase-out of some types of paints. This can allow time for the paint industry to source and produce alternative formulations and dispose of existing stocks of paint exceeding the regulatory lead limit (see the [Model Law Key Element C](#) for more information). Longer dates for phase-out will allow the industry time to find and produce new paint products without added lead, while keeping similar paint properties and quality to maintain a relationship with consumers.

Question 1: In your view, what are the key elements in a company, community or country that promote successful reformulation of lead paint?

Resources:

- [Lead in Solvent-Based Paints in Indonesia \(2021 Study\)](#)
- [Lead in Indonesia's New Enamel Household Paints \(2015 Study\)](#)
- [Lead in Indonesia's New Enamel Household Paints \(2013 Study\)](#)

We encourage you to think about the poll questions before the discussion so you can contribute your responses:

Poll questions:

Poll 1: What is your role with regard to paint?

- Producer
- Importer/Distributor/Retailer
- Supplier of raw materials used in paint production
- Customer/End-user
- Laboratory testing lead levels in paint
- Regulator of paint products
- NGO/Advocate promoting paint without added lead
- No role in relationship to paint
- Other (Please add in comment)

Poll 2: How will you use the technical guidelines on paint reformulation?

- Inform myself or share with others (i.e., SMEs, paint manufacturers) about paint reformulation and best practices
- Inform those who are developing lead paint laws
- Inform those who will enforce lead paint laws
- Learn the steps necessary to reformulate paint
- Find out about alternative pigments and suppliers
- Guide implementation of an existing lead paint law
- Make a case for the feasibility of paint reformulation
- I will not use the technical guidelines (please add a reason in the chat)
- Other (Please comment in the chat)

QUESTION 2 (14h30 GMT+2) – Marcos Alegre, NCPC Peru

Background:

Dialogue between industry and government can facilitate progress toward both reformulating lead in paint and adoption of a lead paint law. One way to facilitate the exchange of information is to establish a technical committee, involving stakeholders such as governmental agencies, industry representatives, practitioners in the field etc. At technical committee meetings, stakeholders can share technical information, experiences, and different points of view. Depending on institutional

arrangements, technical committee meetings may bring stakeholders together using existing institutional structures. In such a case there is no need to start the stakeholder engagement process from scratch.

For instance, in Peru, technical committee meetings took place under the auspices of the Ministry of Health, which already has a policy on heavy metals and was committed to working further on this framework. Additionally, in Peru, the case studies of SMEs reformulating their products described in the technical guidelines helped build confidence in the feasibility of paint reformulation and enabled moving forward with a lead paint law. Consensus amongst the involved stakeholders is central to developing legislation that all will approve.

Question 2: How can industry and government collaboration and exchange of perspectives facilitate progress towards the reformulation of lead paint, whether through proactive industry engagement or government establishing a law?

Resources:

- [Peru case study](#) (from the Toolkit to Establishing Laws to Eliminate Lead Paint)

We encourage you to think about the poll questions before the discussion so you can contribute your responses:

Poll questions:

Poll 1: With which stakeholders will you share the technical guidelines? (Multiple choices answer):

- Relevant government officials
- Paint manufacturers
- Paint importers/exporters
- Paint retailers
- Industry association
- NGO
- Academia
- The suggested stakeholders are not relevant
- Other (please add in comment)
- None

Poll 2: In your view, which factors lead to industry taking initiatives towards reformulation?

- Environmental/social responsibility
- Competitive advantage/Position as a “paint without added-lead” leader on the market
- Government establishing lead paint laws
- Technical knowledge and capacity of personnel
- Availability of equipment/lab capacity
- Availability of pigment in the local market
- Price of reformulation/economic feasibility
- Others (please indicate in the chat)

QUESTION 3 (15h00 GMT+2) - Husam Alkilany, NCPC Jordan

Background:

Reformulation of paint initially occurs on a small scale, often with many trials of different ingredients. Once a paint has been successfully reformulated on a small scale, it is necessary to scale up production, to make enough product for the market. The drivers for scaling up production of reformulated paint include anticipated regulations setting a limit for lead in paint or demand for “safe” paint. At a company level, lead paint reformulation will enhance corporate social responsibility and environmental practices. It will also allow producers to comply with any regulation setting a low limit on lead in paint and to meet consumer demand for sustainable products. For governments, supporting industry in its transition to paint without added lead is a way to address public and environmental health and implement international best practices.

Despite these drivers, barriers may need to be overcome to enable paint reformulation. For instance, companies may have difficulties in adapting their equipment to use different ingredients, finding alternative lead-free ingredients on the local markets, and absorbing any costs. Customers, lacking awareness of the health risks of lead paint, might prefer the prior formulations containing lead. Governments might also face some difficulties in enforcing a lead paint law and monitoring compliance with a limit on lead in paint.

The technical guidelines on paint reformulation can help address the challenges faced by stakeholders and support the scaling up and uptake of the reformulated paint. For instance, paint companies can reduce the cost of reformulation by using the guidelines as a starting point for identifying substitutes for lead compounds and then following the step-by-step approach to reformulating the products. The guidelines also provide successful case studies that can be used by civil society and governments to promote the feasibility of paint reformulation

Question 3: In your view, what needs to be done in your company, community, or country to scale up the production of paint without added lead?

Resources:

- Cleaner Production Unit webpage: <https://cp.org.jo/>
- [Paint Reformulation Technical Guidelines](#)

We encourage you to think about the poll questions before the discussion so you can contribute your responses:

Poll questions:

Poll 1: Which of the following actions have been done already to promote paint reformulation (multiple choice selection)?

- Awareness-raising actions
- Visits to paint company
- Dissemination of technical guidelines

- Capacitating SMEs/paint manufacturers with technical knowledge
- Creation of a multistakeholder technical committee
- Drafting a law
- Passing a law
- Other (please add in comment)

Poll 2: What actions do you see as more significant to facilitate scale-up?

- Awareness-raising
- Adoption of a regulation
- Technical support
- Other (please add in comment)

Instructions for joining this discussion on the set date:

This discussion will be held in **Cisco WebEx**.

- Please register for this discussion by clicking on the following link:
<https://unep.webex.com/unep/j.php?RGID=r0ce061eab475afce73beb7c3b9fa9598>
 - a. Once you have clicked on the link, you will be asked to provide some details for registration purposes.
 - b. Fill out your details and click “Register”.
- You will receive an email in the inbox of the email address you provided during registration with a calendar invite and a link to this discussion with the meeting ID and passcode.
- On the day of the discussion, click on the link in this email or on the button that says, “Join now”.
- You will be redirected to the discussion.

If you have not received any communications for this discussion, make sure you are signed up for the Lead in Paint Community of Practice or send an email to: uctcops@outlook.com

Format of how the discussion will operate:

- To participate in this discussion, sign up at: www.saicmknowledge.org/community
- Should you require assistance or have questions, contact: uctcops@outlook.com
- ✓ This live discussion will be run in Cisco WebEx in the chat section on the set day. Members will introduce themselves upon arrival into the chat room.
- ✓ The discussion presenter will briefly present a verbal introduction.
- ✓ Three questions will be posted during the 1 ½ hour discussion for 25 minutes discussion. The presenter/s will address comments in the chat section of WebEx and all are encouraged to engage.
- ✓ All are welcome to join the discussion which will be held in English. Feel free to write in another language if you are struggling with English and members will assist where possible.

This activity is supported by the Global Environment Facility (GEF) project ID: 9771 on *Global Best Practices on Emerging Chemical Policy Issues of Concern under the Strategic Approach to International Chemicals Management (SAICM)*.