An international network of knowledge sharing & learning for communities with active lead smelters (Community of Practice)

Rationale

Communities that live in close proximity to operating lead smelting facilities share unique challenges when working toward the goal of thriving families, environment and economy. This includes reducing exposure to metals and other emissions that have the potential to impact the community.

There is often a diverse network of local and regional actors working to ensure economic prosperity along with the health of the environment and people. Each location has a unique way of approaching this complex situation. This may include operational improvements, environmental and health regulations, health initiatives such as in-home-visits and blood lead testing, in addition to providing community-based education and programs to reduce potential exposure to lead in the home and community, reduce children's blood lead levels, and ultimately improve peoples' health.

Three such communities include Port Pirie, Australia, Hoboken, Belgium and Trail, BC, Canada. It's under the shared purpose that each location is supporting their community to live, work and play in an area influenced by operating lead smelting that these three international locations have been sharing with each other (2023-2024) in hopes of learning from one another's experience. This builds on more than thirty years of exchanging knowledge and ideas between Port Pirie and Trail, with the ultimate goal of reducing children's blood lead levels in their communities.

Our purpose:

To collectively learn about reducing children's lead (Pb) exposure in communities with operating lead smelters.

Our objectives are to:

- 1. Provide a platform for members to see and hear about projects and programs in other communities with operating lead smelters.
- 2. Share and learn on common challenges and solutions so as to avoid re-inventing the wheel
- 3. Share learnings with those outside the CoP and those that come after us.

How we will do this:

- Connect practitioners working in similar fields of practice in other areas of the world with the intention to learn from each other.
- Share experiences and evidence-based practices (e.g. emissions control, environmental monitoring and blood leads, non-regulated actions, stakeholder engagement, etc.)
- Seek input, ideas and feedback.
- Document our learning.

Who are the members of this Community of Practice?

Interested and relevant practitioners in communities with active lead smelters (as of November 2024: Hoboken, Port Pirie and Trail).

There is a core group that helps set direction and guide the CoP including:

- Port Pirie: Razia Zariff, Jo Lee, Sophie Martin, and Peter Dolan tbc
- Trail: Michelle Laurie, Clare North
- Hoboken: Liene Dhooghe

All members participate voluntarily with the intention to learn, share and understand. Participants need to be aware that each member has their unique culture, confidentiality needs and potential concerns related to privacy. Consent is required to share documents or presentions beyond this group. Still, there is a hope to collaborate on shared documentation for the benefit of those beyond the CoP. We strive for a CoP where knowledge sharing is possible.

Who else can we learn from, draw expertise from via presentation or liaising, and may be interested to participate in special events or talks?

- Academics working on this topic (yet they may not be a practitioner)
- Municipal leaders who govern the communities where smelters exist
- Community members who have experience living in the communities or participating in the programs
- Other experts in the areas of technology, blood lead levels and children, lead reduction strategies in communities

Why participate?

- Access to information and know-how
- External insights and sounding boards
- External advice and support to solve problems
- A venue to discuss current situations, aspirations and needs
- A venue to discuss and build a deeper understanding of common issues, or explore unique or innovative ideas.
- Opportunity to benchmark

Activities undertaken to date:

- June 2022- launch of first conversation of establishing an international CoP
- 2022/3 ideation and concept development (Australia and Canada)
- April, June, August 2024 –core group established from (Australia, Belgium, and Canada) with intent to meet, learn, and share. Topics shared to date include overview of each site and fugitive dust reduction programs.
 - o Working group established to develop proposed detailed structure for CoP
- November 2024- core group meeting to review CoP development and plan for 2025.

Activities for 2024-2025:

- Establishment of CoP structure, protocols and method for assessing functionality/success
- Establishment of platform for asynchronous discussions, sharing contact information, posting presentations or other resources in a searchable way
- Topical meetings online (3 have been held to date)
- Study tour or learning events in-person (Spring 2025 tbc)
- Asynchronous sharing from participation in events, reading papers or relevant reports.
- Annual documentation of what activities were undertaken and key learnings to date.

ACTION PLAN to COMPLETE:

Domain actions:

- Determine specific topics we want to address in the community of practice in the next 12 months. Consider:
 - a. Why is it important?
 - b. What are the questions to ask and answer? (started below)
 - c. When is the right time?
 - d. Who will lead and/or participate?
 - e. How will the work be documented?

Topic areas and intial questions for 2025 to explore are the following:

- 1. Technical and Regulatory Aspects related to Blood Lead and Air Quality
 - a. This includes exchanging best practices, understanding technical means for monitoring lead exposure, materials handling, stockpiling and community dust controls.
 - *b.* Iniitial questions include:
 - *i.* What are the different regulations and expectations of different jurisdictions?
 - *ii.* What type of dust control measures are being employed in different places and how effective are they?
 - iii. What new approaches have you introduced (environmental, including air quality, monitoring and dust control) and why did you feel you needed it?
- 2. Community Health And Safety
 - *a.* This is the primary reason for everyone's work. The need for community participation was emphasized as well as residents feeling safe in their environment.
 - b. Initial questions include:
 - i. What does the community need to know?
 - ii. What interventions have been most effective in improving health outcomes?
- 3. Interventions and Monitoring for Health
 - a. The perception is that effective monitoring and prioritization are crucial for making meaningful public health impacts with limited resources. Prioritizing based on blood lead levels, age of children and proximity to the smelter were all mentioned.
 - b. Initial questions include:
 - i. Which public health interventions have worked?
 - ii. Which are most cost effective?
- 4. Collaboration and Stakeholder Engagement
 - a. It is acknowledged that working together to reduce lead exposure and lower blood lead levels in children is valuable. Collaboration among all stakeholders, including government, industry and the local community is a recurring topic of interest.
 - b. Initial questions include:
 - i. What partnership agreements are in place to facilitate collaboration?
 - ii. How often do stakeholders meet?

iii. How does one move from community participation to community ownership?

Community actions:

- Recruit a core team to refine the concept and next steps (in progress) including:
 - a. roles, responsibilities, decision-making and accountability
 - b. development of a system or platform to connect, onboard new members, converse 1:1 or many to many (a contact list could be a starting point).

Practice actions:

- Develop a schedule for meetings or core events to keep CoP connencted and on track. *Suggested*:
 - a. Late-Feb date for online meeting (Feb 25 or 27)
 - b. Early-mid May meeting for in person (Trail) and online
 - c. August/early Sept online
 - d. Nov online
- Consider online platform for communications and engagement (overlapping concept with 'community').
- Document (as possible) individual and community learning.

Background and Resources on CoP development

Domain

- **Focus** identify specific topics of focus, balance between broad and focussed approaches to overarching and specific issues; understand the key topics and issues that are important to address
- **Importance and impact** why are these issues important and what are the implications for various areas e.g. public health
- **Key questions** what are the questions that need to be answered to address these issues and identify knowledge gaps
- Learnings from the past drawing on previous experiences and connections made in similar context e.g. lead smelting communities and where they were successful and what was missing

Community:

- **Community composition** identifying participants and their roles and ensuring participation aligns with the CoP purpose
- Operational structure and format decide on format of meetings (virtual, face to face, hybrid), frequency and how to maintain ongoing connectivity, divide into subgroups based on areas on interest
- Task rotation and meeting management rotate tasks such as hosting/chairing meetings, capture interactions and work done even if some meetings may happen at sub group level
- Conflict resolution and integration strategies for introduction and integration of newcomers and addressing conflicts and competing objectives within the community
- **Support and sustainability** who will support and sustain the CoP's efforts and how do we balance the diverse needs and ensure ongoing engagement

Practice:

- Knowledge sharing:
 - o **Share and document learnings** e.g. presentation slides or other platforms e.g. annual newsletters
 - Plan and organise activities to share knowledge (consider time commitments and effective ways of sharing) – e.g. quarterly catch-ups (online) vs face to face conference
 - o **Information repository** where will the information be stored and the accessibility and usability of this information and privacy (ensure sensitive information is protected with limited access)

Resources:

Collaboration for Development (World Bank resource on CoPs). https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/communities4Dev.html

People, practice, process

https://collaboration.worldbank.org/content/sites/collaboration-for-development/en/groups/communities4Dev/blogs.entry.html/2021/03/22/a framework for communitiesofpracticepurpose-p-l5kT.html