Development of a Framework Document to Assist Communities in the Characterization of Vulnerability to Environmental Contamination

Documentation from the multi-stakeholder workshop organized by the CEC Secretariat

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The Moment
www.TheMoment.is
Capacity Building to Improve the Environmental Health of Vulnerable Communities in North America Project

Throughout our daily lives, we are exposed to chemicals and pollutants in our environment. This occurs in varying degrees throughout the chemicals’ life cycles—from their production, their use in manufacturing and industry, to their recycling and disposal. Their release to the environment can have significant effects on human health. Many environmental health risks are preventable or can be significantly mitigated through responsible environmental and occupational management.

The Commission for Environmental Cooperation has taken on a project to address this issue from a diverse and multi-stakeholder North American perspective. This project is called Capacity Building to Improve the Environmental Health of Vulnerable Communities in North America.

An objective of this initiative is to develop a framework document, building on existing risk assessment tools and information, to assist communities in the identification of potential health risks associated with environmental pollution.

Development of a Framework Document to Assist Communities in the Characterization of Vulnerability to Environmental Contamination

This framework document will set forth factors to be considered in characterizing the health consequences of environmental contamination for an individual or community. It will act as a foundation for the local and grassroots development of tools to give individuals throughout North America the capacity to make more informed decisions to protect their health from environmental contaminants.

The 1.5 day workshop involved 20 participants from diverse regions across the continent and representing a range of professional backgrounds. The group collaborated to explore possibilities for the framework’s key objectives, audiences, form and content.

Commission for Environmental Cooperation

The Commission for Environmental Cooperation facilitates collaboration and public participation to foster conservation, protection and enhancement of the North American environment for the benefit of present and future generations, in the context of increasing economic, trade, and social links among Canada, Mexico, and the United States.
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Workshop Process Overview</td>
<td>5</td>
</tr>
<tr>
<td>2 What is a Vulnerable Community?</td>
<td>9</td>
</tr>
<tr>
<td>3 Framework Outline</td>
<td>13</td>
</tr>
<tr>
<td>4 Framework Content</td>
<td>16</td>
</tr>
<tr>
<td>5 Framework User Personas</td>
<td>25</td>
</tr>
<tr>
<td>6 Framework Strategy</td>
<td>39</td>
</tr>
<tr>
<td>7 Next Steps</td>
<td>42</td>
</tr>
</tbody>
</table>
Workshop Process Overview

What was the experience?
The workshop was a highly participatory facilitated process that was designed to be primarily a collaborative creation of the framework document.

Participants worked in a range of modes including full group discussion, small group brainstorming and the use of Google Documents for real-time online collaboration. This process drove the collaborative creation of a revised framework draft and strategic ideas for the document’s form and distribution.
### WORKSHOP PROCESS OVERVIEW: AGENDA

#### Day 1

- Project and Participant Introductions
- Discussion on Meaning of “Vulnerable” and “Community”
- Review of Framework Outline and Work-to-date
- Discussion on Framework Objectives
- Breakout Groups on Key Themes: Pillars, Factors, Tools, Challenges
- Revision of Existing Framework Outline Topics
- Parallel Working Groups on Framework Sections: Background, Framework, Challenges
- Discussion on Framework Uses And Users

#### Day 2 (half day)

- Parallel Working Groups to Understand and Develop Framework Structure for Specific User Personas: Policy, Research, Corporate, Funding Agency, Not-for-profit
- Discussion on Framework Ideas and Opportunities
- Insights and Next Steps

- Development of a Framework Document to Assist Communities in the Characterization of Vulnerability to Environmental Contamination
### Collaborative ‘Wiki’ Platform

For the afternoon of Day 1, participants worked on laptops to develop the content of the framework document sections and sub-sections.

To allow for maximum real-time content development and capture, the 20 participants worked in groups of 2 or 3 for several 1-hour rounds. There was one round for each of the main framework sections: Background, Framework, and Challenges. Each group picked a sub-section in which to work and spent an hour for each round typing notes into an editable Google Document.

There were approximately 30 Google Documents in total, one for each sub-section. These were compiled into a Google Sites wiki platform, allowing multiple groups to work on the same or different documents in parallel.

After 3 hours of work, the 20 participants had collaboratively produced a rough draft of each of the 30 framework sub-sections.
What is a Vulnerable Community?

Understanding key concepts
To capture the diversity of participant perspectives from diverse backgrounds and professions, we started off the workshop on Day 1 with an exploration of the term “vulnerable community”.

Each participant individually wrote down 5 words to describe “vulnerable” and 5 words to describe “community”.

The group discussed the diverse possible meanings represented by each term. These are portrayed visually in the infographics on the following pages.
WHAT IS A VULNERABLE COMMUNITY?

What words represent “Vulnerable”?
Word size corresponds to frequency of that word as selected by participants
WHAT IS A VULNERABLE COMMUNITY?

What words represent “Community”?

Word size corresponds to frequency of that word as selected by participants.
Framework
Outline
Draft document structure
Participants reviewed the outline draft of the framework document (at right) as prepared before the workshop by the CEC and the Project Steering Committee.

Participants had the chance to refine the outline before beginning the writing process. Ideas were discussed for what should be added, removed or modified from the draft framework outline. Suggestions were made for additions or changes to some sections (see image on following page).

Participants expressed concern that this document might not be widely used or distributed by the communities that need it most if it reads like an academic document rather than an application toolkit.

In that context it became clear that we needed to define more clearly and strategically the purpose, audience, format, distribution strategy and intended application of the framework.
All of the proposed changes to the outline as indicated by the Post-It Notes are reflected in the current framework document, located on the CEC Sharepoint website.
Framework
Content

Key ideas for the document’s sections and sub-sections
Collaborative Content Development

Participants generated ideas for key content areas of the framework in two exercises:

1. Groups of 5 brainstormed on the main (sub-)sections: Pillars, Factors, Tools, and Challenges. Notes were written on flip chart and are displayed on the following pages.

2. Groups of 2-3 chose a sub-section of the framework based on their experience and interest. They discussed ideas for their assigned section and captured those with typed notes into the Google Documents in the collaborative wiki platform.
Pillars

What are the foundations upon which the framework should be based? (such as sustainability, gender equity, etc.)

- Equity (General, gender, intercultural, inter language)
- Justice (How to make it real)?
- Transparency
- Access to Information
- Ecological Debt
- Sustainability
- Cooperation (transcultural and trilateral)
- Global and Epistemic communities (building grassroots)
- Reciprocity
- Environmental Health as a human right
- Community empowerment
- Building Resilience
- Social determinants of health
- Action level (tools for action, actionable, demandable)
- Awareness and respect of community priorities
Pillars PARTICIPANT NOTES

What are the foundations upon which the framework should be based? (such as sustainability, gender equity, etc.)
Factors

What are the factors that characterize Vulnerability to Environmental Contamination?

- industrial activities
- transportation structure/road locations
- unawareness/lack of information
- right to know ---> lack thereof
- age/lifestyle including pre-conception, early life exposure, life long vulnerability
- adaptation/mitigation
- exposure
- personal choice vs necessity -> lack of option
- income -> affects choice, access, options
- threat: magnitude and frequency, chronic vs acute effects cycle
- environmental roots: direct/indirect
- single vs multiple, one off vs constant, additive and/or synergistic
- nutrition: quality of food available
- access to information
- technology
- literacy
- language
- education
- political stability
- competing demands
- collaboration/coordination
- health status (regional) at population level
- availability of health services
- geography
- money
- isolation/lack of integration in society or system
Factors

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- Awareness / lack of information
- Right to know / lack thereof
- Age / lifestyle including preoccupation
- Adaptation / mitigation
- Exposure
  - Personal choice / necessity / lack of option
  - Income / access / options
- Threat: magnitude and frequency (chronic vs acute)
- Environmental roots: direct / indirect cycle
  - Such as multiple, need to coexist, addition

- Nutrition: quality of food available
- Access to information → technology, → literacy
  → Language → education
- Political stability
- Competing demands
- Collaboration / coordination
- Health status (regional / population level)
  → availability / health services
  → geography, → money
- Isolation / lack of integration in society / system
Initiatives and Tools for Communities

What initiatives, tools and technologies are used or emerging to assist individuals and communities to identify and characterize potential health risks associated with environmental pollution?

- EPA Enviroatlas
- Population information
- Multiscale
- Drivers of change
- Framed Summary
- 2 Types of Tools:
  - Action
  - Informational: i.e. screening tool, health indices, etc.
- Linked but different
- Distinct difference between rural vs. urban
- Distinct difference between stakeholders and decision makers
- Technological difference in all areas need to be accommodated and addressed
- Use of social media as tool for info dissemination and sharing data
- 4 General Categories:
  - technical capacity
  - information capacity
  - civic capacity
  - organizational capacity
- Carex Canada
- Tools to measure industrial risk to community:
  - Technical tool
  - Looking to make more functional for community members
Initiatives and Tools for Communities

What initiatives, tools and technologies are used or emerging to assist individuals and communities to identify and characterize potential health risks associated with environmental pollution?
Challenges PARTICIPANT NOTES
What are the main challenges to the improvement of the Environmental Health of Vulnerable Communities?
Framework

User Personas

Who might use this and what would they need? How might the document be structured and distributed?
FRAMEWORK USER PERSONAS

Possible Framework Applications
From participant brainstorm on a broad range of users

• helping vulnerable communities become less vulnerable
• developing a framework document for use by policy makers and individuals alike
• raising awareness to stop pollution at source
• to provide information for decision making at all levels, leading to the development of tools and solutions
• to help achieve environmental justice
• to reinforce and accelerate programs towards sustainability
• to reinforce the pressure on powerful actors to recognize and address environmental injustice
• to create a framework
• to propel action and collaboration towards the development and promotion of tools and capacity for communities

• to build capacity
• to create awareness and empower communities
• to give direction related to chemical contamination
• to build a strategy to find and reach communities vulnerable to chemical pollution
• to set the stage
• to highlight legislative pathways and limitations for tools at local, national, and international levels
• to promote trans-national cooperation and mutual learning in tool development
• to promote environmental justice and health equity
• to improve community health of vulnerable communities

• to guide development of tools useful to communities on the ground
• roadmap action plan
• vulnerability assessment
• for communities to identify vulnerabilities and make their own improvements or in partnership with others
• to create user friendly tools
• to provide common platform for people/organization working to support/assist vulnerable communities
User Personas

After a discussion about the intention of the framework and who it might be used by (at right), it became clear that we needed to clarify further who the document is for and how they might use it.

To that end participants identified 5 possible (fictional) end-users of the framework and generated ideas in groups of 4-6 for each one. The personas included:

- **Ofelia**
  President of a Mexican Aboriginal Youth organization

- **Betsy**
  a Policy Director at the EPA

- **Linda**
  a researcher working with community health in Mexico City

- **James**
  a Community Relations Director at a Canadian mining company

- **Tom**
  a Funding Director at the National Institute for Occupational Safety and Health
Persona Questions
Asked by each group for their persona
(Outputs for these questions are on the following pages)

Persona Characteristics

1. THE TOOL MAKER (i.e. Ofelia)
   What is Ofelia’s job and key responsibilities?
   Where does she work?

2. THE TOOL USER
   Who in particular might Ofelia directly support to be (or help others be) less vulnerable to chemical pollution? Where do they live? What chemical pollution related threats do they face or work to reduce?

3. TOOLS
   What tools or resources might Ofelia create or provide to that person to help reduce their vulnerability to chemical pollution?

4. CHALLENGES
   What are the challenges that Ofelia may face in creating or providing those tools?

Framework Ideas (from that persona’s perspective)

5. FRAMEWORK IDEAS
   What information or support might the CEC and its partners provide to help Ofelia to overcome those challenges and develop the tool(s)?

   What form might that take (e.g. a report, website, booklet, online community, regional program etc.)?

   How would Ofelia find out about it and access it?
Ofelia
President of a Mexican Aboriginal Youth organization

What can CEC do for Ofelia?

• Organize meetings/workshops/training
• Pressure for acceptance of taxes on agri-chemicals within NAFTA
• Legal support
• Translation/transfer of information and knowledge
• Provide economic/health/social data
• What’s going on with international efforts
• Create awareness of issue
• International agreements
• Develop positive examples of alternatives
• Methodology of process
Ofelia

PARTICIPANT NOTES

President of a Mexican Aboriginal Youth organization
James
a Community Relations Director at a Canadian mining company

What can CEC do for James?

• CEC can enable James, via info such as Taking Stock (PRTR Data) to understand/compare its releases to other similar operations
• Via relationships with researchers/students and community rep, use the framework (factors) to develop a tool to assess community’s vulnerability to the mining operation and tools to address it
• Communications tools (eg. Facebook, twitter, company website)
• Newsletter
• Community gatherings to build relationships
• Radio, TV, public service announcements
James  PARTICIPANT NOTES

a Community Relations Director at a Canadian mining company
Betsy
a Policy Director at the EPA

What can CEC do for Betsy?

• Resource platform (not a static pdf) + online community.
  e.g. Environmental Council of States’ Chemical Right to Know website
  (www.chemicalright2know.org)

• Social media presence on websites like Facebook, Twitter, Pinterest

• Case study support

• Framework platform is a tool to support action
Betsy PARTICIPANT NOTES

a Policy Director at the EPA
Tom
a Funding Director at the National Institute for Occupational Safety and Health

What can CEC do for Tom?

• Public meetings
• Platform for connecting people
• Short videos showing case studies of projects that received CEC grants
• Broad visibility/social medias
• Create a next round of projects that apply the framework
• Conferences, spread the word, social media, environmental networks
• Prioritize NAPECA proposals as users of the framework
Tom PARTICIPANT NOTES

a Funding Director at the National Institute for Occupational Safety and Health
FRAMEWORK USER PERSONAS: GROUP RESULTS

Linda
a researcher working with community health in Mexico City

What can CEC do for Linda?
• Advocacy for more Lindas and better funding for them
• Promote networking between the “Lindas” and the communities
• Social media
• Conference workshops, trinational
• Promotion of trans-disciplinary approaches
• Create catalogue/inventory of community concerns, resources and linkages across the three nations
• Facilitate leveraging of research
• Leadership role of CEC in identifying trans-national issues and help collaboration between the “Lindas” from the three countries.
Linda PARTICIPANT NOTES
a researcher working with community health in Mexico City
Framework

Strategy

What should the content, form and distribution be for maximum community impact?
Framework Objectives

Participants explored the influence or outcomes that the framework could have in response to questions such as:

- What do we want the framework to accomplish, and how will we know we’ve accomplished it?
- To achieve those objectives, what content needs to be in the document?
- What form should the framework document take?
- How should it be distributed to reach its users?

The output of an initial brainstorm is at right. Further ideas were explored in the personas discussion, and some highlights follow on the next page.
Key Ideas for the Framework Strategy
Highlights from Participant Discussions

• the main users are not likely to be citizens at risk; rather, they will be the organizations that support these citizens by creating programs and tools. As one participant said: “It is difficult for vulnerable communities to embrace this fight; their main concern is what they will eat today, not the potential risk of cancer. For this reason, it is important to work with the tool makers to make it possible.”

• the framework could be a resource platform (wiki, website) to empower those who develop programs and tools for citizens, rather than a technical research document (static pdf)

• online distribution would allow broader access, but a print version may be necessary if there are potential users without good web access

• participants could create a working group on tools to research existing community applications that can be distributed in the framework as inspiration for other initiatives

• all participants must advocate for the framework program so it can gain visibility and traction

• there may be an external peer review (participants and other experts) to ensure the effectiveness and integrity of the framework
Next Steps

What’s next?
Who wants to be involved and how?
The insights and contributions from workshop participants on the draft framework outline will be taken into consideration in refining the outline of the framework document.

The CEC will work with the project’s steering committee to review the document, and will establish a process for continuing our collaboration with workshop participants and other experts to draft the final document.
Keep Up-to-date

Vulnerable Communities project page:
http://cec.org/Page.asp?PageID=924&SiteNodeID=1012

CEC Facebook page:
http://www.facebook.com/CECconnect

CEC Twitter page:
https://twitter.com/CECweb
PARTICIPANT LIST

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NOTE
* Denotes a member of the Steering Committee
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