

NEJAC CUMULATIVE IMPACT WORKGROUP RECOMMENDATIONS

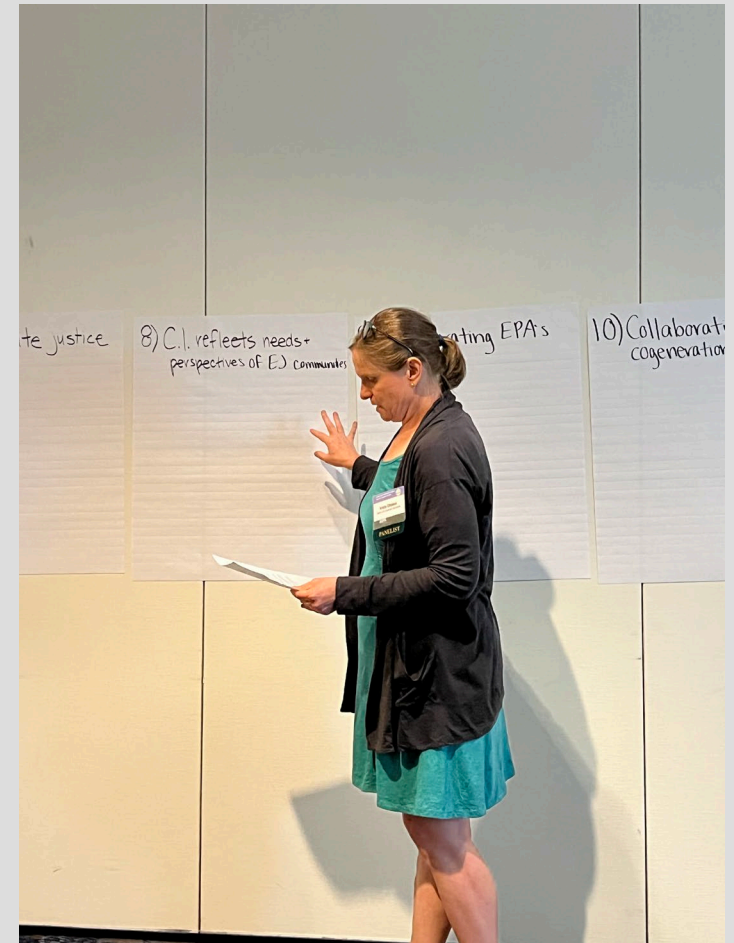
Clean Air Act Advisory Committee
Drs. Sandra Whitehead and Kristie
Ellickson, Co-Chairs
September 18, 2024

NEJAC WORK GROUP

Time limited work group to respond to a particular charge

Comprised of NEJAC members as well as non NEJAC experts

Members represent state and local government, universities, community-based organizations and advocacy groups



Dr Ellickson recaps work group input in Puerto Rico, July 2023

FRAMING

Cumulative impact assessment (CIA) should be used to make more inclusive decisions that address:

- Chemical and nonchemical stressors
- Multiple pollution sources
- Multiple chemicals

CIA should be used to to reduce disproportionate exposures and impacts in overburdened communities

CIA should use lived experience and community generated data to inform policy and regulatory decisions

CIA should be based on the frame of Health Impact Assessment which incorporates both qualitative and quantitative information and methods

CO-LEARNING, INQUIRY PROCESS

Used the charge as guideposts

Learned from EPA staff, states and local governments who have been working on cumulative impacts

Presentations from academics who have been active including Drs Ana Baptista and Nicky Sheats

Collaborative thinking to identify themes, small group writing teams to frame the issues

Iterative writing, presentation and refining of the written work—both as a group and to full NEJAC

Finalization of the report

Presentation and adoption by NEJAC August 8, 2024

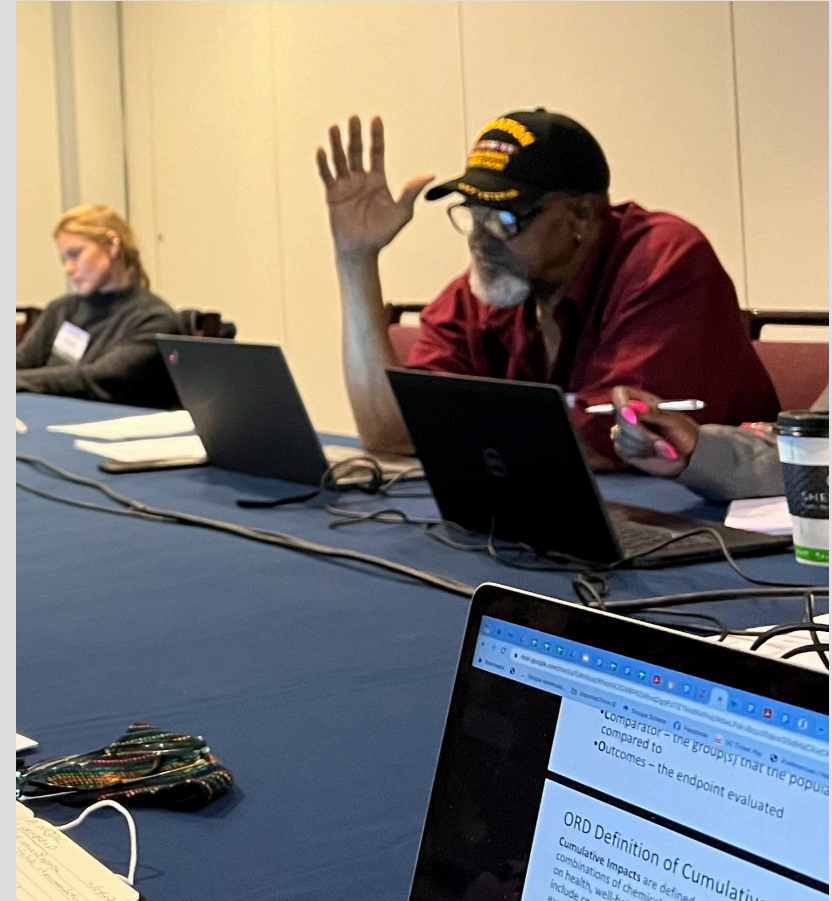
EPA SHOULD DETERMINE AND COMMUNICATE A SET OF PRINCIPLES TO GUIDE THE PRACTICE OF CUMULATIVE IMPACT ASSESSMENT

Should include a framework based
on HIA, a well-established practice

There should be a possibility of
permit denial

Existing burden and vulnerabilities
should be considered

Be included in the regulatory
toolkit to co-create permit
conditions



NEJAC member Richard Mabion raised
his hand during discussion

EPA SHOULD VALIDATE LIVED
EXPERIENCE AND
INCORPORATE IT INTO
ASSESSMENTS AND
PROCESSES

Define and operationalize lived experience (LE) and explain how it is valuable

Develop and institutionalize training on the use of lived experience (LE) in decision making processes

Perpetuate the use of tools for capturing LE and train staff and community partners to use them



ACCELERATING PROGRESS

- Incentivize cumulative impacts work
 - Industry
 - Communities
 - Internally at EPA

Expand and connect monitoring to improve multi-source assessments

Conduct real-time and continuous monitoring

Use environmental justice and cumulative impacts information to determine the placement of monitors

Expand source monitoring “inside the fence”



ACCELERATING
PROGRESS

Innovate access and connections between monitoring, compliance and enforcement, and communities

Development of apps

Piloting of apps connected to C&E
information, emissions, and
corrective actions



ACCELERATING
PROGRESS



ACCELERATING PROGRESS

Expand EPA multi-source standard attainment methods (TMDLs, SIPs) to incorporate multiple pollutants and advance cumulative impacts practice.

- We provided the existing methodology used, and suggestions to make the methods “more cumulative”. For example, moving from a Nitrogen Dioxide SIP to a respiratory irritant SIP.
- We provide some basic steps in completing these types of assessments using the proposed phases of a cumulative impact assessment.

Use existing health condition data to inform assessments regardless of cause

Currently, EPA has no mechanism to incorporate the presence of a statistically significant cancer cluster in traditional risk assessment..

A clean-up threshold based on the traditional risk assessment that does not account for the current health conditions of the community is not credible.



ACCELERATING
PROGRESS

ACCELERATING PROGRESS

Incorporate a cumulative impacts modification factor in default risk-based screening levels

- Screening Levels for Chemical Contaminants at Superfund Sites provides comparison values for residential and commercial or industrial exposures to soil, air, and drinking water.
- The risk-based screening level calculator provides options to select a target risk and **could also include a selection of cumulative impact concerns to reduce the screening level to be more protective** (for example, score on the EJScreen or CDC Environmental Justice Index)

ACCELERATING PROGRESS

Use existing health conditions to inform clean up level determinations.

- In the U.S., there are examples of elevated levels of exposure to pollutants that are associated with cancers that are statistically higher than expected.
- Cleanup levels are set to protect against the risk of excess (that is, above expected) cancer cases associated with pollution exposure.
- If the area already has statistically elevated rates of the same cancer - there is no approved method to incorporate the existing cancer incidence with the risk or probability from the traditional assessment.

THANK YOU!

QUESTIONS?

Dr. Sandra Whitehead, George Washington University
Dr. Kristie Ellickson, Union of Concerned Scientists