

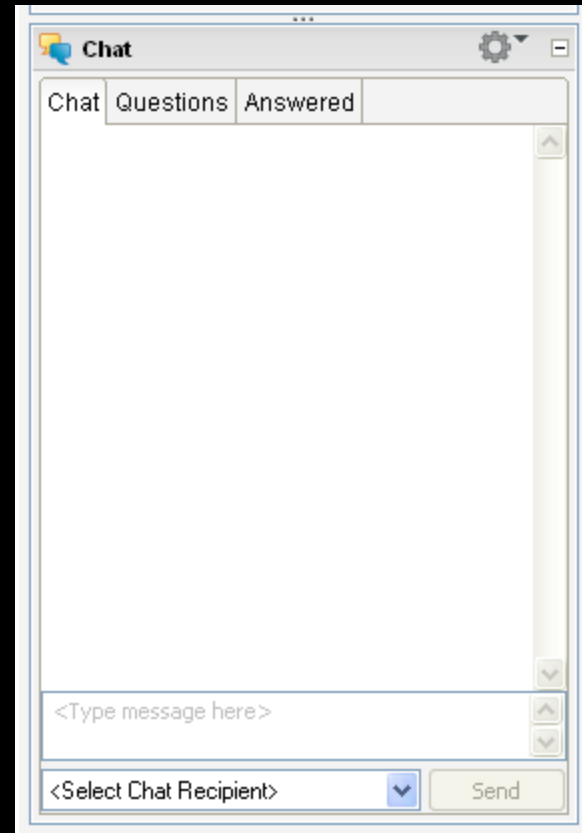
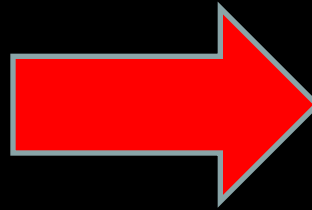
Step Out of the Silo: Science through a Community and Social Justice Lens

Thanks for joining us! The presentation will begin momentarily.

If you are using a phone line to hear the audio, dial (866) 317-5279 conference ID 41952442

Questions?

Use the Chat box to send your questions to the presenters.



Judy Robinson



Executive Director, Coming Clean

coming clean

Coming Clean is a campaigning and movement-building collaborative with a mission to reform the chemical and energy industries so they are no longer a source of harm; and to drive and secure systemic changes that allow a safe chemical and clean energy economy to flourish for generations to come.

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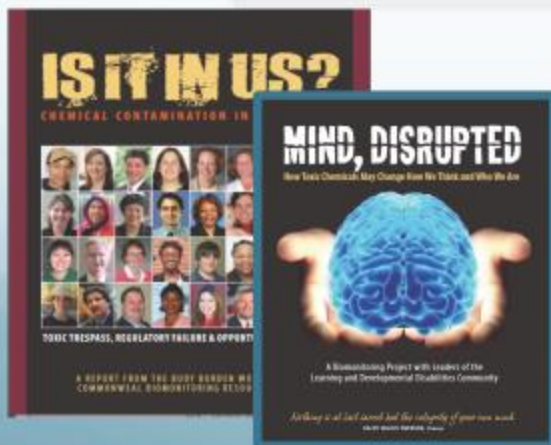
Field Organizer, Southwest Organizing Project

COMMONWEAL BIOMONITORING RESOURCE CENTER

Working with communities to monitor the environment and humans for toxic chemicals – “News You Can Use”

Criteria:

1. Chemical of concern - strong linkages to disease
2. Alternatives are likely to be available
3. Within community, strong campaign/leadership
4. Data from monitoring likely support change in policy.
5. Support from researchers/scientists



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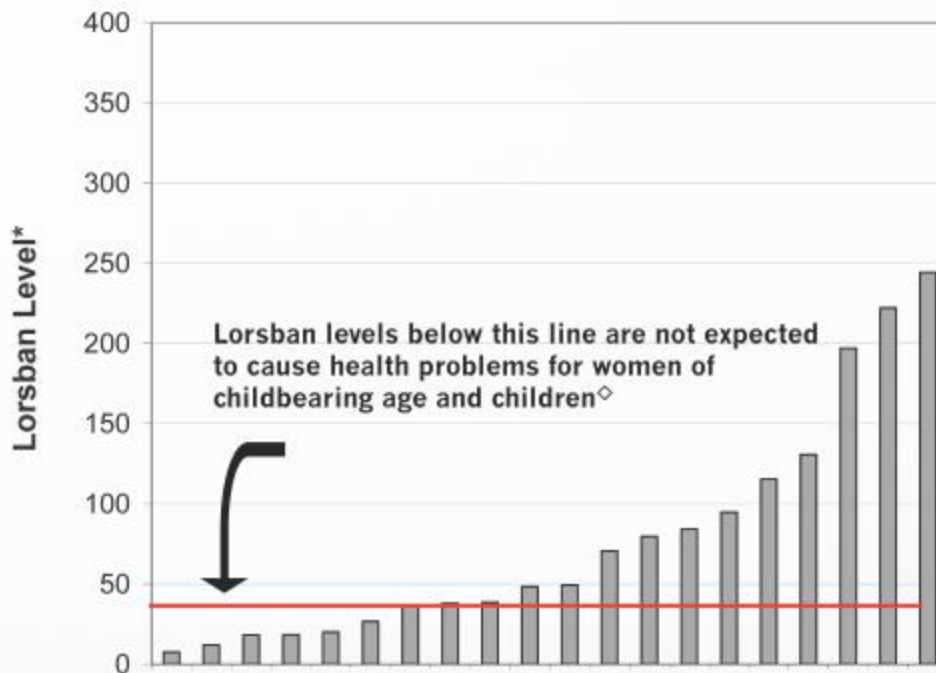
TELLING THE STORY



Ana Espinoza

I would like more children, and there is evidence that babies can be born with health problems when mothers are exposed. I want to ensure my family is safe.

**Lorsban in Participants' Urine
Group 1: Women of Childbearing Age
and Children**



US Environmental Protection Agency (US EPA)
Population Adjusted Dose (PAD) of 30 ng/kg/day

AIR AND HUMAN MONITORING FOR PESTICIDES Project
CALIFORNIA CENTRAL VALLEY

- Major benefit of community monitoring:
 - Collaborative work among researchers, community members can create a rich and important “learning community.”
 - The creation of a learning community can be as important as the the results of the monitoring.
 - Key is acknowledgement and sharing of expertise, information, and connection.
 - Result is ongoing collaboration, a virtual
 - continuing education program.



Obstacle to collaborative work: different cultures in academic world, communities of concern

Academic culture:

- Inaccessible “members only” club
- knowledge keepers; knowledge definers
- firewall from advocacy to ensure research is unbiased.
- “Legacy Science:” Risk assessment; dose makes the poison



Working with communities:

- Identifying issues that can be addressed with monitoring studies
- issues of who owns the data;
- how decisions are made;
- incorporating grass roots expertise

Culture of Communities of Concern

Defining the community, by:

Geographic area (Cancer Alley); Disease (Autism Society);
Occupation (nail salon workers); Product use (foam furniture),
Chemical exposures (farmworkers; Agent Orange Veterans.)

KEY: Immediacy of threat. Hazard assessment. Emerging science

Other factors: stress; racism; economic distress; inadequate nutrition/healthcare

Wedge: Measuring chemicals exposures may leverage systemic change

Constraint: Expertise/wisdom not recognized and not incorporated



Case Study – Transparency in Biomonitoring

- **Question:** Should researchers give individual results from biomonitoring studies to study participants?
- **No** - participants won't understand results; will be scared; will feel helpless.
- **Yes** - people have the right to know and right to act; researchers have no right to withhold information; Participants understand results,
- ***Research:** Interviews with participants indicate that:

Both researchers and participants benefit from sharing information about chemicals, sources of exposure, possibly related health problems, history of community.

More information = less fear

More informed concern = personal and political change



**Silent Spring Institute;*

Commonweal Biomonitoring Resource Center

When Collaborations Work

- The Endocrine Society: stepping out to move science into discussions within REACH about definition of EDCs.
- Dr. Tyrone Hayes: UC Berkeley: research pesticides exposures and reproductive health.
- Dr. Ruthann Rudell: Silent Spring Institute –doing the science that gov. agencies don't do. Working closely with communities of concern. Indoor air pollution
- San Antonio Statement: signed by scientists in support of flame retardant policy change
- “Warning Signs” – citizen science is science



Developing Collaboration Skills

Part One: Recognize commonalities

- a. Both scientists and communities are under attack;
- b. Both carry expertise, but will be effective only when expertise is shared;
- c. Both need long term learning communities to address enormity and immediacy of toxic trespass and the need for systemic change





Doing your homework

Science in service social justice and social transformation



Homework Qs

- Why am I working outside my “own” communities?
- What community am I entering (and who has defined this as a community)?
- Why am I entering this specific community?
- How am I entering it (am I parachuting in, have I been invited (and by whom))?

Homework Qs

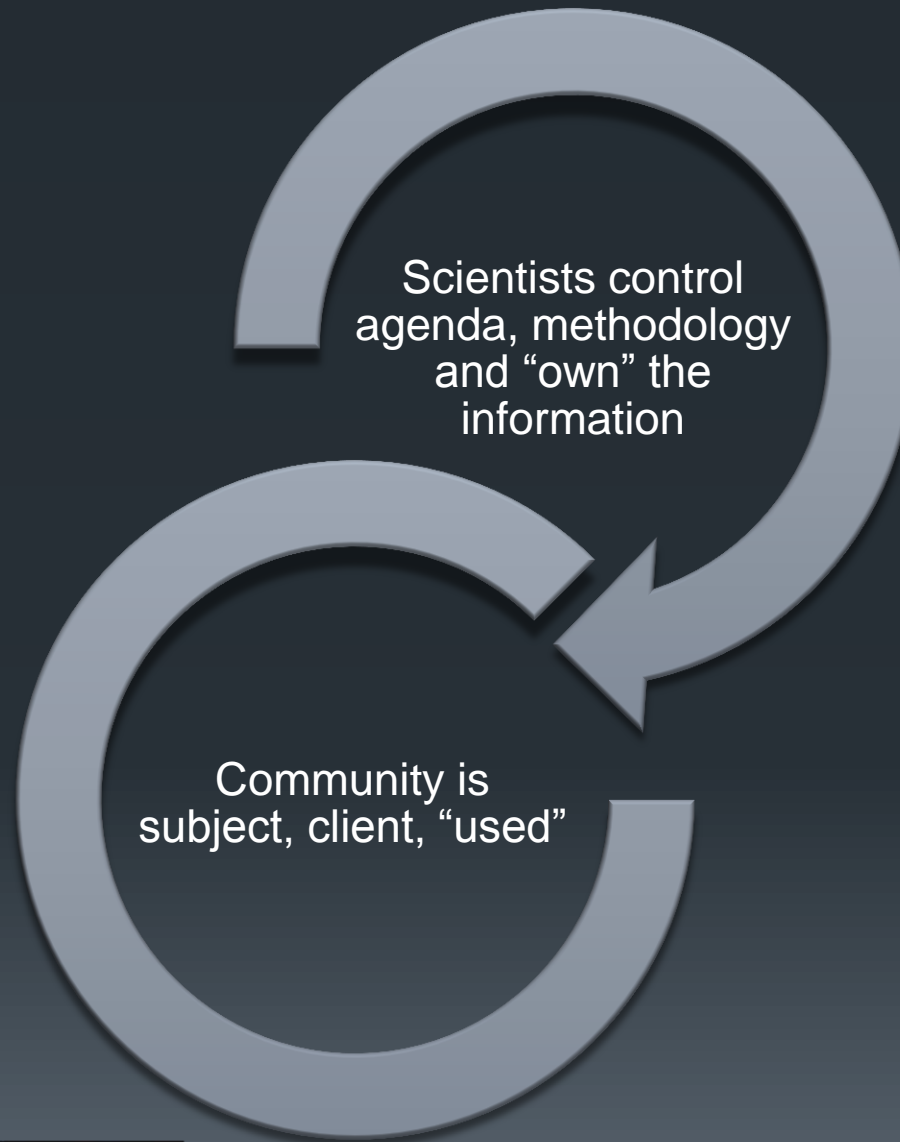


- What is my “research intent” (serving my own interest as researcher, working in partnership with community on a mutual interest, serving the community as they seek to address their own questions)?
- What research (and how) been carried out in this community already?
- What has the community told me about how to carry out an effective and useful research project with them?
- How am I preparing myself to work in solidarity with the community as it works for self-determination?

Science and Neutrality

- Choosing neutrality likely means choosing the side of continued marginalization and oppression
- Every scientist has both known and unknown biases that run through the process of designing and implementing research projects.
- Are you honest and open about your known biases? How might you go about revealing your hidden biases?
- What comes up for you when you consider first building relationships with and then explicitly supporting a research methodology that *emerges from within* that community?

The current pattern



Science and Authentic Partnership

The “scientist” moves to facilitative role, and the science is done as a collective process. Science is a joint activity, NOT DONE on a community, but rather by and for a community seeking to answer self-determined questions with support.

Community Science Partnerships

- We build power to enhance the quality of life by partnering scientists with community stakeholders in a way that advances the insight of scientists about community context and advances the capacity of communities to practice citizen science. In addition, it helps re-shape the way science is imagined and done (not as something abstract, neutral, distant).
- Community Science Partnerships engage communities and scientists as partners in designing ways to get at critical patterns in communities that need to shift, and new patterns the community would like to see emerge.

Practice Questions

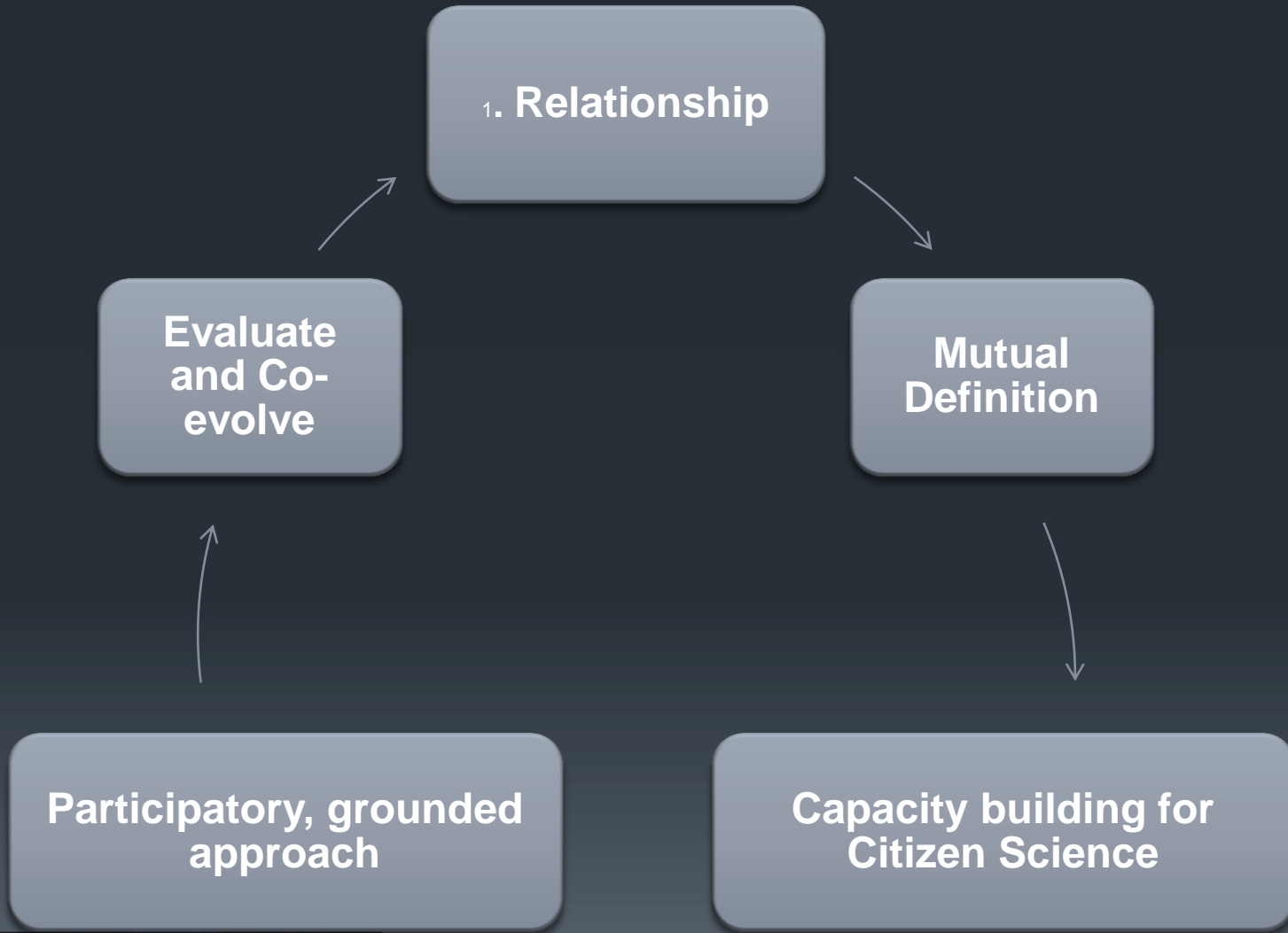
- What do you know, coming in, about prior experiences this community has had with scientists and partnerships?
- What comes up for you initially, as you consider doing science with a social justice lens AND a community-led process?
- If community-led, how is community defined and who has defined it? How is the community directly involved, rather than through representatives?
- There are a myriad of social justice issues in communities, how do you imagine you will define the social justice framework (single issue, multi-issue, intersectional)?

Practice Questions

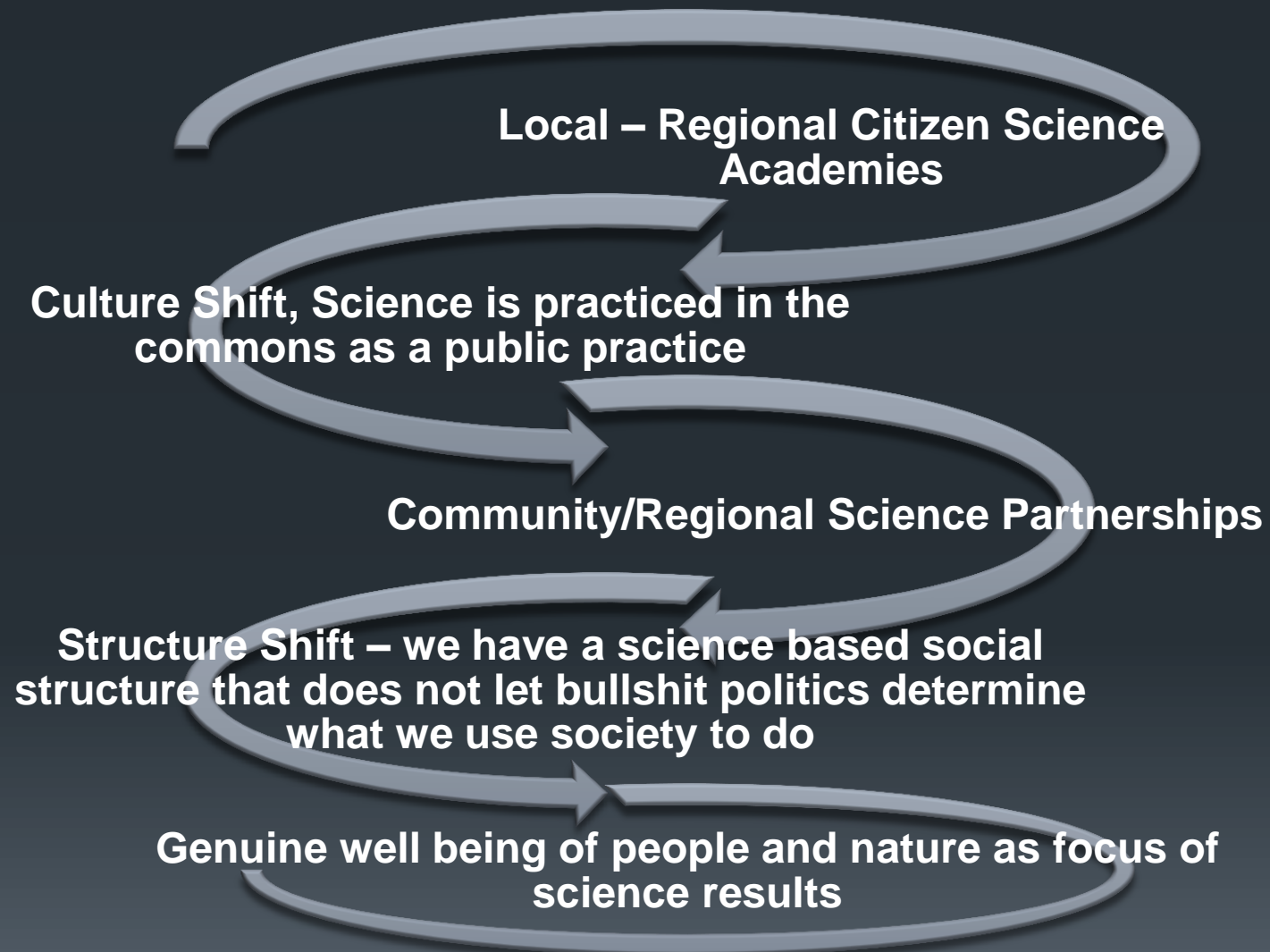


- How do you operationalize a research methodology that is truly done with the community (how do you close the technical gaps)?
- How do you facilitate the partnership so that you mutually build consciousness, capacity and power for social change?
- What are the patterns of marginalization, oppression and privilege operating in and on the community that negatively impact the prospects and process for mutual power building?
- How do we organize in a way that is by/with community rather than allow the polarity of on/for/over to run through our partnership?

Community Science Partnerships Organizing Model



The emerging picture



Community-Science Partnerships through the Southwest Organizing Project





Group Asks EPA to Limit Air Pollution in Minority ABQ Neighborhoods

BY JOSEPH KORWENTING

The Southwest Organizing Project (SWOP) has filed a complaint with the Environmental Protection Agency claiming that minority communities in Albuquerque are being unfairly exposed to excessive air pollution and that the Albuquerque/Bernalillo County Air Quality Control Board is not adequately addressing the problem.

The complaint was submitted by the New Mexico Environmental Law Center claiming that three neighborhoods — San José, Greater Gardner and Mountainview, which are predominantly minority — have been overly burdened by the large number of pollution-causing industries that routinely expose residents to chemicals that may increase their risk of illness and shorten their lifespans.

A recent report by Bernalillo County Place Matters, an organization that advocates for policies to ensure healthier environments in low-income areas, found that the three neighborhoods listed in the EPA complaint all exhibit higher rates of asthma, respiratory disease and certain cancers that are associated with elevated levels of air pollution.

According to SWOP, the city and county's response to residents' complaints about air pollution has been to resist or to grant permits to polluting industries. Joan Reynolds, SWOP's Community Organizer says that, among other things, SWOP has asked the Albuquerque/Bernalillo County Air Quality Control Board to make changes in how it assesses the impact of pollutants on these neighborhoods.

"My feeling is that they're totally non-responsive to the community. We have to take it to the federal level to get any impact, any changes," Reynolds said.

The San José Neighborhood isn't going to show up in any of the New Mexico Tourism Department's TV ads anytime soon. The neighborhood is west of I-25's Gibson Boulevard exit. From a distance, it just looks like a heavily industrialized area.

"It's true that businesses are creating jobs in the neighborhood. It's creating jobs for people that are working in the medical community who come out to treat people who get sick"

— Steven Aheya, San José resident

In part, that's exactly what it is, with at least 20 industries including a cement plant, recycling centers, bulk oil facilities and a railroad yard. It also is home to two EPA Superfund sites. But tucked in among factories and businesses is a poor but resilient neighborhood and a couple of residents who've decided they've had enough pollutants dumped on them.



Steven and Esther Aheya stand outside their San José neighborhood home, which is less than 100 feet from the railroad tracks. Homes from other communities and nearby manufacturing plants can be seen in the neighborhood.

The Southwest Organizing Project is asking the EPA to limit the cumulative effects of air pollution in three Albuquerque neighborhoods — San José, Mountainview and Greater Gardner. All three border the Burlington Northern Santa Fe railroad tracks. Mountainview and San José are at the south end of town. Greater Gardner is between Griegos and Montañero roads Northwest.

Esther and Steven Aheya live in the home that Esther grew up in. "It was my grandmother's house," said Esther, a soft-spoken but determined woman. "My grandmother bought it for \$90 and a chicken back in the 40s." It's a small, neat house adjacent to a vacant lot and very close to some of the polluters the complaint targets.

"The railroad's right behind my house," Steven Aheya said, pointing to the tracks that are less than 150 feet from their back door. Diesel engines often park there, idling for days at a time, he said.

"When trains come with petrochemicals, they off-load directly onto a truck, they pump out [chemicals] into the trucks. Directly south is a cement facility... directly to the west we have a petrochemical asphalt company." Neighbors often complain about chemical smells, especially, says Esther, a smell that's similar to roofing tar.

In 2012, residents of the neighborhood, in partnership with Breathe In New Mexico (a campaign organized by SWOP) took samples to measure air quality over the course of a year. They found elevated levels of three pollutants: chlorobenzene, elemental carbon and particulate matter. All three have been associated with increased health risks.

According to the Breathe In New Mexico report,

one likely source of chlorobenzene — which was at levels ten times higher than typically found in urban air — is the roof tar. Chlorobenzene is a degreasing tar smell frequently noticed in the neighborhood.

According to the EPA, chronic exposure to chlorobenzene can affect the central nervous system, causing numbness. It can also cause headaches and irritation of the upper respiratory tract and eyes. Exhaust from the idling diesel engines is the probable source of elemental carbon, and levels that residents recorded were high enough to be associated with an increased risk of hospitalizations for cardiovascular and respiratory problems.

The report didn't specifically identify sources for particulate matter, which was 50 percent higher than the EPA's annual standard, but exposure to elevated levels is associated with lung disease, asthma and cardiovascular problems.

According to Eric Jantz, a staff attorney at the New Mexico Environmental Law Center, the Clean Air Act, which was passed in 1970, isn't about keeping our air clean. "The Clean Air Act allows companies to dump a certain amount of pollutants into the air," he says. "An air quality permit is basically permission to pollute."

Jantz readily admits that the average air quality in Albuquerque is good. But, he added, "People in San José, Mountainview and Greater Gardner neighborhoods don't get to breathe that average air quality."

One of the main concerns for residents of the three neighborhoods is "cumulative impact." Although individual industries may meet air quality standards, "The [Air Quality] Division doesn't look at how a new plant's pollution will interact with other pollution already there," Jantz said. The city's Air Quality Division does site visits and evaluates permit applications submitted to the joint Albuquerque-Bernalillo County Air Quality Control Board.

"There's no accounting for additional pollutants, no taking into account what the synergistic effects might be" of multiple pollutants, he said.

While individual companies may be within the standards for pollutants, when pollutants from other companies are accounted for, the total may well exceed allowable levels. He said that some other states do require that cumulative impacts of pollution be considered, but in Bernalillo County every permit is looked at in isolation.

In January 2014, SWOP submitted a request to the air quality board asking that it consider cumulative impacts when granting air quality permits. The proposal was met with fierce opposition from the business community. Hundreds of letters were sent to the board, claiming that implementation regulations for cumulative impact would be too

CONT. ON P.





Young
Lungs at
Work

What's in the
air we breathe?

HEALTHY
AIR! HEALTHY
LUNGS!!!

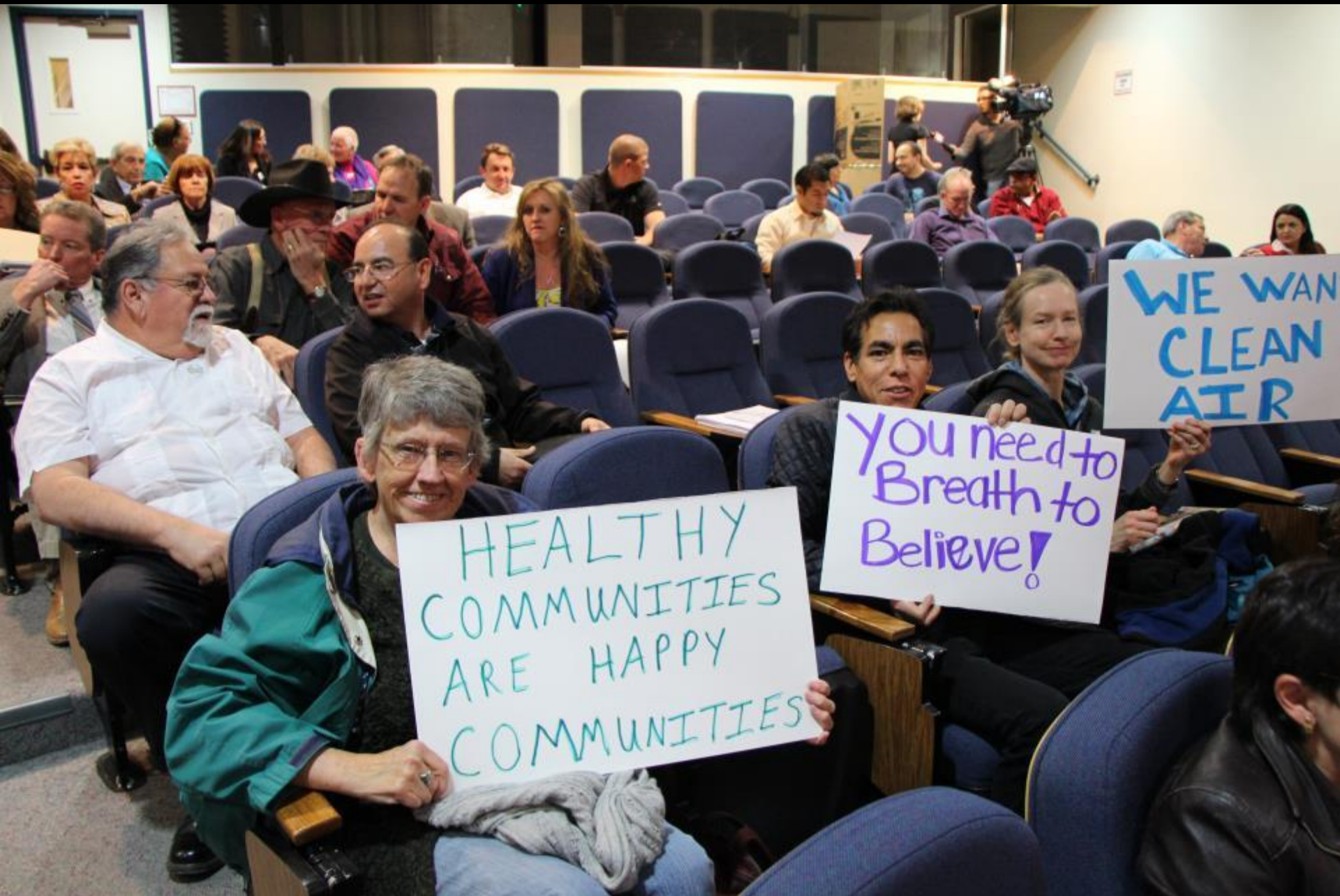
Communities
Need Clean
Air Now!

YOU'RE
KILLING
ME SMOG
SMALLS

Legalize
CLEAN
AIR

South W...

ALBUQUERQUE/BERNALILLO COUNTY



HEALTHY
COMMUNITIES
ARE HAPPY
COMMUNITIES

You need to
Breathe to
Believe!

WE WANT
CLEAN
AIR



GRIEGO
BERS



Do Not
Alter Work

Questions?

Thank you for joining us!

Next webinar with Coming Clean and UCS:

June 29, 3pmET:

Hear Me Out: Making Meaningful Connections through
Storytelling