The EPA is developing a better understanding of community-based cumulative risk assessments (CBCRA) to consider multiple environmental stressors when prioritizing courses of action.

New tools and methods are being developed that focus on local-scale applications, such as near-road air quality models and decision support tools that foster interdisciplinary collaborations.

The EPA is working with our RESES community partners in order to develop applications that can then be used across the country in a variety of local applications.

Collaboration with the community of North Birmingham, a seven-neighborhood area located just north of downtown.

Partnering with a community group in the Ironbound district, a community bordered by three railways and a major airport.

Using Citizen Science Air Monitoring (CSAM) units to measure local conditions.

Administrator McCarthy was recently given a demonstration on the CSAM units (photo).

Connection to SHC Portfolio

- 2.2.1. Enhancing Community Public Health
- 2.2.3. Securing and Sustaining EJ
- 1.61 Decision Science & Support Tools
- 2.62 Community Public Health and Well-Being
- 4.61 Systems-Based Assessment Methods for Community Sustainability

Purpose/Utility of Research

1. The EPA is developing a better understanding of community-based cumulative risk assessments (CBCRA) to consider multiple environmental stressors when prioritizing courses of action.

2. New tools and methods are being developed that focus on local-scale applications, such as near-road air quality models and decision support tools that foster interdisciplinary collaborations.

3. The EPA is working with our RESES community partners in order to develop applications that can then be used across the country in a variety of local applications.

Lessons Learned

- Building partnerships and defining roles and responsibilities is key to a project’s progress.
- Community values and decision analysis must be considered throughout the CBCRA process.
- After listening to community feedback and evaluating available resources, issues that are the greatest risk are not always the highest priority for mitigation – i.e., targeted risk reduction.
- Data, models, and measurements are powerful tools for engagement and action so long as they are implemented in an understandable and collaborative manner.