



Connecticut Equity and Environmental Justice Advisory Council (CEEJAC)

Air and Transportation Subcommittee Meeting Minutes

October 30, 2023 1:00-3:00 PM ET

Location: DEEP Air Quality Monitoring Lab – 9 Windsor Ave Windsor, CT

This was an in-person meeting and it was not recorded.

This is a public meeting and is posted on the [Connecticut Equity and Environmental Justice Advisory Council](#) website.

Disclaimer: Please note this is not a word for word translation.

CEEJAC Members Present

- Alex Rodriguez, Save the Sound
- Jay Stange, Center for Latino Progress
- Robbie Goodrich, RACCE

1. Presentation about Air Quality Monitoring

- a. CT air monitoring network
 - I. 14 sites run by CT DEEP
 - II. 15th site is run by EPA, which looks at air pollutants and meteorological parameters.
- b. Air monitoring objectives
 - I. Compliance monitoring
 - II. AQI report – data that is collected every hour and pushed into EPA
 - III. Control strategies
 - IV. Trend analysis – Some sites have been here since the 1970s/1980s
 - V. [State Implementation Plan \(SIP\)](#) development
 - VI. Characterize Sources
 - VII. Support long term health assessment and model evaluations
 1. East Hartford McAuliffe Park tour video
 2. Georgetown climate change air quality monitoring workgroup of northeast and mid-Atlantic states and DC

- a. 9 states and DC - Strengthening relationships with other state agencies to prevent recreating the wheel.
 - b. Build a new community of practice for state agencies working on community-based air quality monitoring to expand hyperlocal air quality monitoring projects.
 - c. Use data to inform policy actions.
 - d. Main part of their work is providing series of trainings:
 - i. EJ & Equity 101;
 - ii. Air quality foundations;
 - iii. Conducting equitable community engagement;
 - iv. Air Quality Monitoring Framework and Conducting successful purpose driven CBAQM projects.
 - 1. Three of their trainings were made available nationally. Still an ongoing effort.
- c. Air measurement devices - Particular Matter (PM)
- I. Federal reference method
 - II. Integrative sampling – measures from midnight to midnight
 - 1. Time resolution is 24 hours – has limitations such as losing mass due to the sun or not being able to record in real time
 - 2. PM 10 is localized which doesn't penetrate deep in the lungs
 - 3. PM2.5 is what they rely on but they still do get data from PM10
 - 4. Run certain testing every three days, so missing some data
 - 5. \$21k for one of their PM machine another one costs \$41k
 - 6. Can communicate with another machine remotely and it records data every ten seconds.

2. Community Monitoring

- a. Purple air sensors measure fine particulate materials
 - I. Low cost = wider use of applicants
 - II. Data displayed and downable in real time – online public map
 - III. Have more than 80 and 40 of them are DEEP owned/loaned out to community groups/individuals/schools.
 - IV. The website has some tools to manipulate the data to gain better understanding of the data.
- b. Alex Rodriguez: In this area how is the data fairing today? Is the air quality good today?
 - I. Yes, the quality is quite well. Rain is helpful to eliminate some pollutants.
- c. CT DEEP sensor loan program
 - I. Need a power source and WIFI
 - II. Currently, they have 49 sensors deployed
 - III. Easy to install and DEEP here to support – DEEP installation guide and purple air has its own instruction guide
- d. Questions & Answers

- I. Participant mentioned they put together their own machine in less than twenty minutes – very easy. During the smoke event they looked at the data and shared with the local community.
- II. Process – What is the time frame for decision making for purple monitor data that is being affected?
 1. State advocated for a tight 24-hour standard. When EPA publish their data, they do implementation rule which links to the monitoring that states must do to demonstrate they are complying with air standards. Have to meet a certain number. They can do hot spot analysis if necessary or if flagged by the data.
- III. Is this something the subcommittee can reverse? They do not have the capacity to measure what's considered scientifically appreciated data. Community/citizen science informs the agency to further protect EJ communities. Processes in place to reverse the paradigm?
 1. Best thing subcommittee can do is populate the state with more equipment to get more data. This will feed them information that can inform actions they take. Can't monitor everything. Harder to use bad sensors as a screening tool. They want to advice community groups to let them know what screening tools they should be relying on.
- IV. Best place to set up a purple air monitor – community outreach? Can we have them at every elementary school?
 1. Depends on what the goal is. Purple air machine data are being looked at by EPA making it reliable data. They do have limited staff which is why they haven't done more work. They do have purple air machines at schools which have then added this into the curriculum.
 2. Someone is working with public schools to install and monitor these machines but relationship building takes time/effort. Communities are good at providing feedback and explaining their needs.
- V. Of the 49 purple monitors they have in place right now, where in the state are they looking at for data to better inform the department?
 1. Focusing on CT cities which represent larger portion of the population. Not just focusing on there but they have background sites to contextualize the data. Looking at EJ communities since they have controlled locations. They are open to expanding their location.
- VI. What incentives can the department offer for residents especially acknowledging how energy cost is not cheap?
 1. Offering purple air – win/win situation. Gets education piece – not charging for the equipment. Not really considered energy piece – fair point but considering purple air as the contribution to the effort. Will keep continue to talk about this concern.

- a. Air quality is driven by particle material – monitored for ozone as well. Currently evaluating sensors for monitoring ozone. A lot to look forward to in the future – once tech catches up with the demand.
 - b. Their outreach work also involves education: Teaching communities about their work and clarifying misunderstanding (e.g. folks wanting to measure ozone in their homes but that not being localized).
2. [AirNow](#) website has a lot of helpful data including from outside of the state. They have a fire and smoke map on there, but they are working on a new map. This data can also forecast wildfire events.
 3. Purple air machines are limited in their screening, so they are looking for air sensors that measure more stuff. They will compare the new data with what they already have to ensure the data is good. Testing over lifetime, cost, quality, ease of operation, and whether they can handle changing seasons. A lot of evaluation going on but getting early in on the game. Want to assist with new exciting projects which is why this work matters so they can identify best fit.
 4. Current and upcoming projects
 - a. GCC workshops
 - b. Outreach events
 - c. Working with grant partners on their air monitoring study
 - d. 24 organizations have signed up for flag initiative.
 - e. Site tour with youth orgs
 - f. Working on analysis guide
 - g. Working on improving their website, newsletters, and public signage

3. GMAP

1. Mobile air quality monitors
2. 3 categories of pollutants
3. Using GMAP as an enforcement screening tool
 1. Primarily in EJ communities
 1. Air monitoring campaign just started two months in Hartford and East Hartford
 2. Are holding public listening sessions to get feedback
 3. Are also using these to address complaints.

4. Tour of GMAP Vehicle and Lab

A list of Registrants was not collected for this meeting