



**February 28, 2014 Testimony of Rebecca Bratspies, Director of the CUNY Center for Urban Environmental Reform before the New York City Council Committee on Environmental Protection**

My name is Rebecca Bratspies. I am a professor at CUNY School of Law, and a resident of Astoria, Queens. I am here on behalf of the CUNY Center for Urban Environmental Reform (CUER), of which I am the director. CUER's mission is to enhance the legitimacy of environmental decision-making, and to increase the fairness of environmental decisions, by expanding participation, building civic capacity, and increasing access to environmental information.

At CUER, we are dedicated to the belief that environmental justice is a critical aspect of social justice and that communities are entitled to participate fully and meaningfully in environmental decisions that affect them.

Thank you for the opportunity to talk with you today about environmental justice in New York City. I am going to talk briefly about environmental justice in general, and about NYC air quality. I will then talk about what the Council can do to support environmental justice communities going forward. I am going to describe an initiative that the CUNY Center for Urban Environmental Reform currently runs in a number of Queens schools, and will focus in on one particular environmental justice campaign that emerged from this program. We think this program is a good way to build community capacity, while also supporting Core Curriculum learning goals. We would welcome the support of the City Council to expand this program to more neighborhoods and to reach more school children with our message of environmental empowerment, and with our program that cultivates student capacities at the intersection of science, art, and civics by drawing on their real-world experience in their own communities here in New York City.

**Environmental Justice**

Two decades ago, President Clinton signed Executive Order 12,898—*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. This Order directed the government to tackle the long-neglected problems of environmental racism, and environmental injustice. It affirmed the basic principle that everyone is entitled to fair treatment and meaningful involvement in the environmental decisions that affect them, their families, and their communities. It stand for the proposition that low-income neighborhoods and communities of color should not bear disproportionate burdens of industrial pollution, waste handling, bus and truck depots, or other polluting activities. Executive Order 12,898 affirmed every American's equal right to breath clean air, drink clean water, and live on uncontaminated land.

Two decades later, we are still struggling to make that vision a reality.

## **Environmental Justice and Air Quality**

In 2013, Queens got an F from the American Lung Association for ozone pollution, and a B in particulate matter pollution.<sup>1</sup> The Bronx received a D for ozone and a C for particulate matter. The New York metro region as a whole ranks unfavorably high—one of the top 20 metro areas for ozone pollution, in the top 15% or 20% for particulate matter, depending on whether the measurement is annual or daily exposure.<sup>2</sup> Queens and New York Counties tied for second dirtiest counties for short-term particulate exposure.

These pollutants are cause respiratory ailments, and lung cancer, as well as causing or contributing to heart attacks, strokes, and congestive heart failure. They also harm the central nervous system and cause reproductive or developmental harms. Children, the elderly and those with cardiovascular disease or compromised lung functions (as from asthma) are particularly vulnerable.

In Queens, 217,562 individuals, roughly 1/10 of Queens total population of 2.247 million suffer from asthma, including 43,898 children.<sup>3</sup> In the Bronx, those figures are 134,908 out of a total population of 1.39 million—again 10%.<sup>4</sup> That figure included 34,874 children. Nationwide, counties that receive an ‘F’ for ozone quality have 4.5 higher rates of adult asthma than do counties that receive an ‘A’, as well as 5 times the rates of childhood asthma, 4 times the rate of cardiovascular disease, and people are 4.5 times more likely to live in poverty.<sup>5</sup>

The data on exposure to these air pollutants and on asthma are generated on a county-wide basis, meaning that the statistics I just quoted cover the entire borough of Queens. Were the pollution actually evenly distributed throughout Queens and the Bronx, this data would be adequate. The story it would tell would be grim—one in every 10 persons suffering from asthma—but it would provide meaningful information to citizens and policymakers. But, neither the pollution nor the asthma cases are evenly distributed. Asthma prevalence is inversely proportional to income, with asthma rates for those with annual household incomes below 15,000 more than double those for households with annual incomes exceeding 75,000 [15% versus 6.8%].<sup>6</sup> Over 17% of African-American children suffer from Asthma, compared to 8.7% for white children, and 11% for Latino/a children.<sup>7</sup> Children under four years of age from low-income areas are more than four times as likely to be hospitalized for asthma than children from high-income areas.<sup>8</sup>

The available data cannot capture the local differences in air quality that drive these different health outcomes in neighborhoods within each borough.

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<sup>1</sup> American Lung Association, State of the Air 2013, County Rankings: Queens  
<http://www.stateoftheair.org/2013/states/new-york/queens-36081.html>

<sup>2</sup> Id. at <http://www.stateoftheair.org/2013/states/new-york/queens-36081.html>

<sup>3</sup> Id.

<sup>4</sup> American Lung Association, State of the Air 2013, County Rankings: Bronx,  
<http://www.stateoftheair.org/2013/states/new-york/bronx-36005.html>

<sup>5</sup> American Lung Association, State of the Air 2013, at 12.

<sup>6</sup> New York State Asthma Surveillance Summary Report at 28, 37 (Fig. 5-7) (Fall 2009).

<sup>7</sup> Id. at 42, fig. 5-12.

<sup>8</sup> New York City Dept. of Mental Health and Hygiene, Asthma Facts, 2d. Ed. at 7 (May 2003)

This is the great insight of environmental justice—environmental harms are clustered and that poor and minority communities are disproportionately likely to suffer. These same groups are also much less likely to have access to environmental amenities like parks, green spaces and street trees. Without careful attention to the dynamics of environmental injustice, efforts to improve the overall environment may not reach these overburdened communities, and in some cases, even increases their burdens. The City Council must make environmental justice a priority. Children in the Bronx and in Queens deserve the same opportunity to breathe air that will not harm their health as do children in other communities.

One thing the City Council can do is to help develop more fine-grained data. County level, or zip code level studies do not capture New York City’s environmental justice experience. The information is out there—EPA has a tremendous repository of information from GIS mapping, from permit filings and from the toxic release inventory. Were that information compiled into a comprehensive report about air quality in New York City on a neighborhood by neighborhood basis, it would be a tremendous resource for communities trying to advocate for better air quality. One model for this is the New York City Department of Mental Health and Hygiene Asthma Facts Report. The Department should be issuing its third Asthma Facts Report very soon. This report breaks down asthma cases, including hospitalizations, deaths and missed school days, by neighborhood. Asthma is a rough proxy for poor air quality but we need similarly nuanced and granular reports that focus directly on neighborhood air quality, particularly with regard to particulate matter and ozone exposures. I encourage the City Council to read the Asthma Facts Report when it is released, and to consider funding a similarly fine-grained air quality study. Making this data available in a usable fashion to local community groups would greatly increase their ability to participate in decision-making, and to advocate for cleaner air within their communities.

That said, data and access to data is only half the story. The other half is civic capacity to participate in decision-making. CUER’s mission is to help build that civic capacity.

### **CUER’s *Mayah’s Lot* Project**

Our most important project to date is an environmental justice education project built around CUER’s environmental justice comic book titled *Mayah’s Lot*. *Mayah’s Lot* tells the story of a young girl who inspires her urban neighbors to save a vacant lot from becoming an industrial toxic waste facility, while learning about administrative law and citizen science along the way.

As you can see from the copies I provided along with my testimony, *Mayah’s Lot* is a visually stunning book. It provides an accessible entry point into these very complex conversations for students, engaging even reluctant readers. As a tool for environmental education, *Mayah’s Lot* has received critical acclaim, and has been adopted and disseminated by Illinois EPA and Mississippi DEC, and featured prominently on EPA’s environmental justice blog.

Using *Mayah’s Lot* and the accompanying video, CUER runs 6-8 week civic and environmental capacity building workshops in public schools. The education project includes place-based, hands-on civics, science, and arts education. The curriculum is aligned with the common core, but attuned to the lived experience of the students in each class. Each class identifies an environmental justice

issue in their community, and strategizes about how to collect data and to marshal that data to advocate for social change.

I urge the city council to support the *Mayah's Lot* project and to help us bring this civic capacity building and environmental education to communities across New York City.

### **Current Environmental Justice Campaign at PS85Q**

Finally, I would like to draw your attention to one specific environmental justice campaign that emerged from the CUER's *Mayah's Lot* project.

At PS85Q, a Title I school in Astoria Queens,<sup>9</sup> CUER worked with the 5<sup>th</sup> grade. PS85 is located directly adjacent to the elevated N/Q subway line (approximately 50 feet away). The students identified subway noise as their biggest environmental justice issue.

The N/Q trains pass by PS85Q 24-30 times per hour.<sup>10</sup> Each train takes 30-40 seconds,<sup>11</sup> eating up 20% of instruction time. Students complain the noise interferes with their concentration; making it hard to take tests, to concentrate, to hear their teacher. The noise levels routinely top 90 dB—a level of noise that vastly exceeds ANSI standards of 35dB for exterior noise;<sup>12</sup> the World Health Organization recommendations of 35dB external noise for instructional spaces;<sup>13</sup> and the New York School Construction Authority standards of 45 dB for new or renovated schools.<sup>14</sup> The New York City Department of Environmental Protection noise standards recommend that noise in schools near elevated subways should not exceed 35 dB LA during teaching sessions.<sup>15</sup>

After reading *Mayah's Lot*, and learning about environmental decision-making, the students of PS85Q decided to take action. They collected noise data from their classrooms, and wrote and signed a petition calling on the DOE and the MTA to reduce the noise burden in the school. Working with *Mayah's Lot* artist Charlie LaGreca, they transformed the subway into a cartoon noise villain, and spent weeks designing their own comic books that defeated the noise villain in story and picture.

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<sup>9</sup> PS85Q serves 574 elementary school students, nearly 70% of whom are eligible for free lunches (69.2%). The student body is 30% Hispanic/Latino, 25% East and South Asian, 3% Black and African American, and 41% White. NYC DOE Quality Review Report 2012-2013, [http://schools.nyc.gov/OA/SchoolReports/2012-13/Quality\\_Review\\_2013\\_Q085.pdf](http://schools.nyc.gov/OA/SchoolReports/2012-13/Quality_Review_2013_Q085.pdf). Nearly 11% of the students are English Language Learners. NY DOE Comprehensive Educational Plan 2013-2013, [http://schools.nyc.gov/documents/oaosi/cep/2012-13/cep\\_Q085.pdf](http://schools.nyc.gov/documents/oaosi/cep/2012-13/cep_Q085.pdf).

<sup>10</sup> Sixteen N trains (eight in each direction) run past the school during rush hour, roughly one every 6-7 minutes; fourteen Q trains (seven in each direction) also run past the school during that time window, roughly one every 7-9 minutes. Overall, this means 30 trains pass the school between 7:50 and 8:54AM—one every 2 minutes. <http://www.mta.info/nyct/service/pdf/tncur.pdf>; <http://www.mta.info/nyct/service/pdf/tqcur.pdf>. The rest of the day 24 trains an hour pass the school.

<sup>11</sup> The students and parents confirmed these numbers through direct observations.

<sup>12</sup> American National Standards Institute, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools (2002).

<sup>13</sup> WORLD HEALTH ORGANIZATION, GUIDELINES FOR COMMUNITY NOISE, Section 4.3.2 (1999).

<sup>14</sup> School Construction Authority, Design Standards, available at <http://www.nycsca.org/Business/WorkingWithTheSCA/Design/Pages/DesignStandards.aspx>.

<sup>15</sup> NYC DEP, A Guide to New York City's Noise Code, [http://www.nyc.gov/html/dep/pdf/noise\\_code\\_guide.pdf](http://www.nyc.gov/html/dep/pdf/noise_code_guide.pdf) (November 2011). The NYC DEP does not have authority to regulate the MTA, so these guidelines are in the nature of recommendations rather than binding legal obligations.

This student engagement prompted CUER to begin a wider investigation of schools burdened by the noise associated with elevated subway trains across the city. We are in the early stages of this broader study, but what we have found so far has been shocking. Thirty years ago, the MTA and DoE measured noise at PS85Q. They documented noise levels above 90 dB in this school, and similarly unacceptable noise levels at nine other schools.<sup>16</sup> At the time, they promised to fix things. Yet, fast forward 30 years—we are still measuring those same 90+dB noise levels today. Moreover, PS85Q is not alone—CUER has identified up to 20 other schools that may be in a similar situation. This is a serious environmental justice issue.

CUER made a video to document the scope of the noise problem at PS85Q,<sup>17</sup> and helped parents hold a rally outside the school.<sup>18</sup> The New York Times wrote a story about the problem.<sup>19</sup> Elected officials including former Councilmember Vallone and current Councilmember Costa Constantinides attended the rally and have been very supportive.

Unfortunately, the MTA and the DoE have made no commitments to resolve the problem—either at PS85, or on a city-wide basis. And this is a problem that can be resolved! The DoE could install appropriate Outdoor-Indoor Transmission Class materials and appropriate ventilation (including air conditioning) to dramatically reduce the noise inside the building. The MTA could install rubber padding under the tracks and/or construct a sound barrier to reduce the noise overall.

I urge City Council to support the students of PS85Q and to use your influence to persuade the DoE and MTA to take the steps necessary to provide all children in New York City with an appropriate learning environment, including one that is quiet enough not to harm their health or interfere with their ability to learn.

## **Conclusion**

In conclusion, I thank you for your attention to environmental justice as an important social policy issue. I urge you to:

- 1) Fund and request research that analyzes environmental data on a fine-grained neighborhood by neighborhood level;
- 2) Support projects like *Mayahs Lot* that bring civic capacity and environmental awareness to schools; and
- 3) Support the students and parents at PS85Q and at other schools around the city by advocating for noise mitigation.

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<sup>16</sup> Study Excerpt Attached to this testimony.

<sup>17</sup> PS85Q has a Noise Problem, <https://www.youtube.com/watch?v=fTcjy3j4sjg&feature=youtu.be>.

<sup>18</sup> Tess McRae, PS85 Calls for an End to Train Noise, Queens Chronicle (Dec. 26<sup>th</sup>, 2013)

[http://www.qchron.com/editions/western/ps-calls-for-an-end-to-train-noise/article\\_24432a95-dcd2-553f-ae7d-1a56f2d6c77f.html](http://www.qchron.com/editions/western/ps-calls-for-an-end-to-train-noise/article_24432a95-dcd2-553f-ae7d-1a56f2d6c77f.html).

<sup>19</sup> Cara Buckley, Parents Push to Quiet Roar from Trains Near Queens School, New York Times (Dec. 3, 2013)

<http://www.nytimes.com/2013/12/04/nyregion/parents-push-to-quiet-roar-from-trains-near-queens-school.html? r=0>.