

August 13, 2019

Dear Representative Kenyatta:

My name is Ebony Griffin and I am a staff attorney at the Public Interest Law Center focusing on environmental justice and the Law Center's Garden Justice Legal Initiative. Thank you for allowing me the opportunity to speak before you today about an issue I feel so passionately about. I also want to commend you for taking steps to tackle this issue head on, especially at a time so critical to the future of our planet.

Environmental racism or environmental injustice is a system that results, whether by conscious design or institutional neglect, in the disproportionate exposure of people of color to environmental hazards and environmental health burdens.¹ We see the residual effects of environmental racism all around us in the form of increased air pollution and lack of access to greenspace: childhood asthma, increased cancer rates, high instances of mental illness, decreased learning capacity, increased mortality rates in extreme temperature events, increased rates of diabetes and obesity, and higher mortality rates during and immediately after environmental disasters.

In our environmental work, the Law Center uses a variety of methods to ensure that Philadelphia's most vulnerable residents have access to a healthy natural and built environment, but also that they have a seat at the table and a voice in what happens in their neighborhoods. The Garden Justice Legal Initiative accomplishes this by providing pro bono legal representation to urban farmers and community gardens in the city in efforts to protect and preserve the city's greenspace, which is being lost due to development pressure. In addition, with climate change upon us, the city's major environmental concerns will only get worse so the Law Center is advocating for additional protections for greenspace and just environmental permitting.

GREENSPACE AND CLIMATE CHANGE MITIGATION

In Philadelphia, environmental injustice manifests in a number of ways. The issues I see most commonly can be lumped into two general buckets: lack of access to greenspace and inequitable environmental permitting.

Abandoned, tax delinquent properties create a vicious cycle of blight in urban areas throughout the Commonwealth. With approximately 43,000 vacant lots, the problem is

¹ *Environmental Justice: A Primer for Allies, Academics, Planners, and Scientists*, COLUMBIA UNIV., <http://www.columbia.edu/cu/EJ/definitions.html> (last visited Aug. 12, 2019).

particularly acute in Philadelphia. Over 300,000 Philadelphians live on blocks with one or more abandoned houses or parcels.² This large inventory of vacant land not only decreases the value of neighboring properties, but burdens residents and local government as vacant properties create significant health and safety issues.³ However, thousands of these lots have the potential to be repurposed as food producing gardens and greenspaces, improving the quality of life in low income neighborhoods while simultaneously mitigating impacts of climate change. As climate change increases, the planet warms and sea levels rise. This results in hotter overall temperatures and more severe weather events such as flooding. In urban areas, minor increases in surface temperature can be deadly.

A phenomenon known as the Urban Heat Island Effect (UHI effect) causes cities to have average daytime temperatures up to 10 degrees higher than their suburban counterparts.⁴ The phenomenon occurs due to the inability of impervious surfaces such as buildings and concrete to absorb heat, radiation, and water.⁵ Philadelphia is one of the cities most impacted by the UHI effect and has instituted an aggressive heat emergency response system to mitigate the dangers of extreme heat.⁶ Greenspaces, particularly gardens, help with this by reducing the surface temperature, creating a cooling effect in areas densely packed with concrete and reducing mortality rates among vulnerable populations during heat waves.⁷ Additionally, greenspace serves as a sponge to absorb and process excess stormwater which in turn reduces flooding and its consequences.

Greenspace also has proven benefits on air quality, another issue prevalent in Philadelphia. Pennsylvania ranks number two in the nation among states with the largest differences between races and between the wealthy and poor in exposure to air pollution.⁸ Emissions from oil and gas operations cause ozone smog, in turn contributing to Black children

² See Jake Blumgart, *Philly's 43,000 Vacant Lots Faces a Fresh Political Battle*, PLAN PHILLY (July 9, 2018), <http://planphilly.com/articles/2018/01/26/philly-s-43-000-vacant-lots-face-a-fresh-political-battle>.

³ See generally, NAT'L VACANT PROPS. CAMPAIGN, VACANT PROPERTIES: THE TRUE COST TO COMMUNITIES (2005), available at <https://www.smartgrowthamerica.org/app/legacy/documents/true-costs.pdf>; ERWIN DE LEON & JOSEPH SCHILLING, URBAN INSTITUTE, URBAN BLIGHT AND PUBLIC HEALTH: ADDRESSING THE IMPACT OF SUBSTANDARD HOUSING, ABANDONED BUILDINGS, AND VACANT LOTS (2017), available at

https://www.urban.org/sites/default/files/publication/89491/2017.04.03_urban_blight_and_public_health_vprn_report_finalized.pdf.

⁴ HEATHER KNIZHNIK, THE ENVIRONMENTAL BENEFITS OF URBAN AGRICULTURE ON UNUSED, IMPERMEABLE AND SEMI-PERMEABLE SPACES IN MAJOR CITIES WITH A FOCUS ON PHILADELPHIA, PA, UNIV. OF PA. 33(2012), available at https://repository.upenn.edu/cgi/viewcontent.cgi?article=1044&context=mes_capstones.

⁵ *Id.*

⁶ *Id.*; see also Anthony Wood, *Summers are Hotter, but Heat-related Deaths have Dropped. Philadelphia has a Lot [to] do with that.*, THE PHILA. INQUIRER (July 18, 2019), available at <https://www.inquirer.com/news/heat-wave-deaths-philadelphia-hot-nights-record-20190718.html>.

⁷ KNIZHNIK, *supra* note 4, at 10-11, 15.

⁸ LAURA P. CLARK, ET. AL, NATIONAL PATTERNS IN ENVIRONMENTAL INJUSTICE AND INEQUALITY: OUTDOOR NO₂ AIR POLLUTION IN THE UNITED STATES, Figure 2 (2014), available at <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0094431#pone-0094431-g002>; Sydney Brownstone, *The 10 Most Polluted States for People of Color*, FAST COMPANY <https://www.fastcompany.com/3029160/the-10-most-polluted-states-for-people-of-color> (last visited Dec. 7, 2018).

throughout the city experiencing the majority of the 12,200 asthma attacks that occur in Philadelphia each year.⁹

Volatile organic compounds (VOCs) and methane vented and leaked from the oil and gas supply chain and nitrogen oxides (NOx) formed by sources such [as] gas flaring and engines at natural gas facilities react together in the presence of sunlight to form ozone smog. Smog can impair lung function, trigger asthma attacks, and aggravate bronchitis and emphysema. Children, the elderly, and people with existing respiratory conditions are the most at risk from ozone pollution.¹⁰

Surface smog is formed when VOCs and NOx react in the presence of heat and sunlight. In addition to reducing surface temperature and, thus smog creation, urban gardens also help clean the air.

In light of the critical environmental, health, and social benefits of urban gardens, the Law Center is aggressively working to protect and preserve Philadelphia's greenspace. We currently represent gardens using various legal strategies for preservation, including adverse possession, an ancient legal doctrine that allows someone who has been caring for land for at least 21 years to petition the court for legal title. Due to the intense development pressure that gardens in the City are under, we are lobbying for a reduction in the statutory period for adverse possession from 21 years to 10 years for vacant land. Finally, we are advocating for more aggressive protection of greenspace by the Philadelphia Land Bank.

EQUITABLE ENVIRONMENTAL PERMITTING

While greenspace can help mitigate the impacts of climate change, significant changes to the environmental permitting structure are necessary to ensure that environmental justice communities, that is communities in which either at least 30% of the inhabitants are from minority groups or 20% are below the poverty level and who will bear the biggest burdens of climate change, are protected and involved throughout the process.¹¹

Legal scholars have recommended several solutions to inequitable environmental permitting. The common theme is that, to make a difference in the lives of vulnerable communities, Pennsylvania and Philadelphia must change the way they analyze and

⁹ LESLEY FLEISCHMAN ET AL., CLEAN AIR TASK FORCE, GASPING FOR BREATH: AN ANALYSIS OF THE HEALTH EFFECTS FROM OZONE POLLUTION FROM THE OIL AND GAS INDUSTRY 4, 10 (2016), *available at* http://www.catf.us/wp-content/uploads/2018/10/CATF_Pub_GaspingForBreath.pdf (“Ozone smog that results from oil and gas industry pollution poses a real threat to children who suffer from asthma.”); *see also Oil & Gas Threat Map*, <https://oilandgasthreatmap.com/threat-map/> (last visited Dec. 7, 2018).

¹⁰ FLEISCHMAN, *supra* note 9 at 6.

¹¹ *PA Environmental Justice Areas*, P.A. DEP'T. OF ENVTL. PROT., <https://www.dep.pa.gov/PublicParticipation/OfficeofEnvironmentalJustice/Pages/PA-Environmental-Justice-Areas.aspx>. (last visited Dec. 7, 2018).

approve permits with environmental impacts. Here are approaches that could accomplish equitable permitting.

Cumulative Impacts Analysis

First, state and local governments must require that permit issuing agencies consider pollutants in the aggregate when making permitting determinations in environmental justice communities. Currently, permitting is based on national and locally set air quality indices based on a maximum allowable concentration of pollutants in the ambient or surrounding air. However, the law does not require the agency reviewing permits to account for an aggregate of pollutants and how a new facility would impact that number. Specifically, new permitting processes must take a cumulative impacts¹² approach to determining potential effects of pollutants on vulnerable communities. The White House Council on Environmental Quality (CEQ) defines cumulative impact as:

...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 CFR §1508.7

In practice, this would require the issuing agencies to conduct modeling in every environmental justice community where a new permit is proposed and look at the potential emissions from the proposed site in conjunction with emissions from existing sources.

Health Impacts Analysis

Additionally, state and local governments must adopt a permitting process that considers the health of a community prior to granting permits. Examples of viable options include an Environmental Justice Protocol (EJP) or a Vulnerability Scale. The EJP, first proposed by former Public Interest Law Center attorney, the late Jerome Balter, would make protection of public health and civil rights explicit parts of the permit application review process.¹³ The EJP is based on a comparative public health analysis resting on the idea that communities with poor public health need protection from environmental pollution *regardless* of the cause of the health disparity.¹⁴ This protocol would make use of state and local health department statistics to provide stakeholders with a practical means for determining which communities must be protected against pollutant emitting facilities.

In practice, the EJP would require state and local agencies to promulgate laws, regulations or protocols requiring the analysis of public health and demographical data as part of the

¹² The U.S. Environmental Protection Agency has defined cumulative impacts as the combined, incremental effects of human activity. See U.S. ENVTL. PROT. AGENCY, CONSIDERATION OF CUMULATIVE IMPACTS IN EPA REVIEW OF NEPA DOCUMENTS 1 (1999), available at <https://www.epa.gov/sites/production/files/2014-08/documents/cumulative.pdf>.

¹³ Jerome Balter, *The EPA Needs a Workable Environmental Justice Protocol*, 12 TUL. ENVTL. L.J. 357, 368 (1999).

¹⁴ *Id.* at 367.

permitting process.¹⁵ Unlike the cumulative impacts analysis, which would apply only to facilities in environmental justice areas, the EJP would apply to all permits with environmental impacts.

Another option is the Vulnerability Scale. The Vulnerability Scale is similar to the EJP in that it puts the health of a community at the forefront of a permitting decision; however, it is more simplistic in application. The Vulnerability Scale would assign a numerical value to communities based on criteria such as maternal health, community asthma rates, childhood hospitalization rates, etc. The community would then receive a “grade” based on the total sum of its vulnerability criteria. If based on this number, calculated from empirical and public health data, a community is considered vulnerable, then the city would place a moratorium on siting new facilities within a certain radius of the community.

CONCLUSION

Communities of color and low income communities are most often those left dealing with the effects of environmental pollution and the life altering consequences of climate change. Regulatory and enforcement agencies reinforce this paradigm by failing to adopt equitable permitting mechanisms. Pennsylvania and Philadelphia both have a unique opportunity to provide a healthier environment to its most vulnerable residents. Removing barriers in access to greenspace is a valuable option to mitigate the impacts of climate change. However, moving forward, both the state and local governments must pass legislation to ensure that environmental permitting is done equitably and with health in mind. Thank you for listening.

¹⁵ See *id.* at 368.