

**Testimony of Angela Licata.  
Deputy Commissioner for Sustainability  
New York City Department of Environmental Protection  
before the  
New York City Council Committee on Environmental Protection  
concerning**

**Intro. 185: In relation to the permitting and monitoring of portable generators; Intro. 297:  
In relation air quality monitoring at designated “heavy use” thoroughfares; Intro. 312: In  
relation to the creation of a comprehensive program to respond to air quality alert days;  
and Intro. 313: In relation to the creation of an air quality task force.**

**Committee Room, City Hall  
May13, 2014, 1 pm**

Good afternoon Chairman Richards and Members. I am Angela Licata, Deputy Commissioner for Sustainability in the New York City Department of Environmental Protection (DEP). I am joined today by Assistant Commissioner Thomas Matte of the Bureau of Environmental Surveillance and Policy at the Department of Health and Mental Hygiene (DOHMH), and Deputy Commissioner Keith Kerman of the Department of Citywide Administrative Services (DCAS), as well as staff from our and other agencies. Thank you for the opportunity to testify on these four Introductions that address important air quality issues.

Despite marked progress in recent years, air pollution in New York City still has a significant impact on public health, especially among the most vulnerable groups. The Administration supports continued action, including laws, regulations, and other initiatives that improve air quality and promote public health. However, these laws must balance efforts for data collection through air monitoring with scientific research, policy development, regulation and enforcement. The City’s clean air efforts should be designed to advance efficient and effective emission reduction and control strategies that complement existing local, state, and federal measures. The Administration looks forward to working with the Council to give practical effect to this principle in these proposed laws.

Intro. 185

This bill proposes to require that operators of portable generators obtain a certificate of operation, and that the generator be continuously monitored when in use for more than a threshold time period.

The Administration recognizes the value of air monitoring as part of an overall air quality management regime, but there are important limitations on whether ambient monitoring can detect the emissions contribution of a particular generator or source. In many New York City locations, the density of on-road vehicles and buildings and their contributions to ambient air pollution in the vicinity of the monitor will far exceed the emissions from a single portable generator, even if the generator is malfunctioning. Also, the ability of a monitor to detect the impact of a particular generator will depend on wind speed and direction relative to the generator, so a single stationary monitor would not suffice, even if emissions were great enough to have a measurable impact against the background of pollution from other sources. Finally, continuous monitors that can operate in all weather conditions and transmit data for remote

monitoring are costly and require electric utility connections. Requiring such monitoring for each portable generator would therefore be extremely expensive, logistically complex, and ultimately infeasible.

DEP further recognizes the need to clarify which requirements apply to the regulation of generators as a whole, and to portable generators in particular. A smoke test can be used to determine whether a generator is functioning as designed without costly air monitoring. In Intro. 271, which will revise and update the City's Air Pollution Control Code (Code), the Administration has proposed that the registration of any generator, including portable generators, include documentation that the generator has passed a smoke test performed in accordance with the procedures set forth in U.S. Environmental Protection Agency (EPA) Method 9 - Visual determination of the opacity of emissions from stationary sources. Alternatively, a professional engineer or registered architect can certify that a stack test has been performed. Although DEP has always required a smoke test, DEP supports requiring that the methodology used should be the Method 9 opacity test.

Regarding the requirement to file a certificate of operation rather than a registration for a portable generator, we believe the simpler registration process is more appropriate for portable generators falling within the size range of equipment covered by the Code. In both the existing and the revised Code as proposed in Intro.271, all boilers and process equipment, including generators, are required to obtain either a registration or a certificate of operation based on its size. Obtaining a certificate of operation is a more detailed and time-intensive process than a registration; therefore, in the revised Code we are raising the threshold size for equipment that will require a certificate in order to account for advancements in technology and cleaner fuels. In the existing Code, the lower size range of boilers and generators that requires a certificate of operation was based on the fuel choices and emission ratings of equipment from more than 40 years ago.

Given these factors, we believe that a registration is more appropriate for the portable generators covered by Intro 185. The change from requiring a certificate of operation to a registration will not involve a loss of data since the registration application for portable generators will capture all pertinent engine information. The level of detail built into the certificate of operation process focuses on demonstrating how the piece of equipment will tie into the building's emission system. A portable generator is a piece of stand-alone equipment, and focusing instead on the equipment characteristics accomplishes the goal of identifying and better understanding the emissions profile of the generator.

#### Intro. 297

This bill proposes to require air monitoring on heavy-use thoroughfares, which are defined as any highway, roadway or other traffic corridor that has traffic volume greater than the fiftieth percentile of the average New York City roadway corridors or has traffic in excess of 100,000 vehicles on an annual basis. We assume that this is intended to be consistent with EPA guidance for determining what is a heavy-use thoroughfare, and which requires one near-roadway nitrogen dioxide (NO<sub>2</sub>) monitor in all metropolitan areas with over 500,000 persons, and two monitors in metropolitan areas with over 2.5 million persons or one or more roadways with over 250,000 vehicles, on average per day. Street level air monitors would be required, at a minimum, at two

major intersections on every designated heavy use thoroughfare and at every recreational area by December 30th, 2015. An annual report of monitoring results would be submitted to the Speaker and Mayor and posted on DOHMH's website.

We are supportive of programs that reduce exposures to traffic-related pollutants and reduce the public health burden of traffic pollution. However, we have three concerns about the bill as written: first, it would be prohibitively expensive to implement; second, it would not take advantage of existing air monitoring data to identify locations most impacted by traffic and other combustion pollution; and third, we believe resources would be better spent identifying feasible actions the city can take to further reduce traffic pollution.

Concerning the cost and feasibility of implementing the bill as written, we believe the amount of monitoring proposed by this bill is problematic, and compliance with the bill as drafted would require a tremendous amount of resources, posing an unfunded mandate for the City. We estimate that one monitor could cost approximately \$150,000 to \$230,000 a year to operate and maintain. Extrapolated to the number of roadways to which the monitoring requirement might apply, the monitoring cost alone would place an unsustainable burden on the City.

Based on New York Metropolitan Transportation Council (NYMTC) data, Intro. 297 would require 97% of roadway links in NYC to have monitors because they exceed 100,000 vehicles annually; this amounts to approximately 54,000 monitored roadway links. If we look at average traffic by unique road name (averaging the daily traffic across links on the same road), then 1,119 unique roadways exceed 100,000 vehicles annually out of the 1,163 uniquely named roadways in New York City in the NYMTC database. Even looking at roadways that exceed the 50th percentile of roadways would include over 580 roadways that would qualify as a "heavy use thoroughfare."

An additional technical problem with the bill as written is in the range of air pollutants for which monitoring would be required. The bill defines "regulated air contaminant" as "oxides of nitrogen, volatile organic compounds (VOCs), sulfur dioxide, particulate matter, carbon monoxide, carbon dioxide, polycyclic aromatic hydrocarbons (PAHs) or any other air contaminant for which a national ambient air quality standard (NAAQS) has been promulgated; or any air contaminant that is regulated under section 112 of the Clean Air Act, as amended." This list includes pollutants that do not have an NAAQS (e.g., carbon dioxide).

The only EPA standard that is relevant to near-road concentrations is the NO<sub>2</sub> short term standard (100 parts per billion (ppb), 1-hr maximum standard). For the remaining pollutants, in order to obtain ambient concentrations to estimate human exposure, the NAAQS refers to levels based on monitoring conducted away from roadways, such as on rooftops. Collecting extensive near-road data would not be comparable to standards for those pollutants with ambient air quality standards (e.g., sulfur dioxide and carbon monoxide). Other pollutants mentioned in the bill, such as VOCs and PAHs do not have ambient air quality standards with which monitoring results could be compared.

Another concern about the bill is that the monitoring proposed would not take advantage of data already being collected to inform locations most heavily affected by traffic and other combustion

pollutants. For the only pollutant for which there is a near-roadway standard, NO<sub>2</sub>, EPA guidance for selecting locations where air quality standard exceedances may occur calls for using combinations of traffic counts, truck counts, and indicators of congestion. EPA technical assistance documents indicate that longer-term monitoring—the same type of monitoring that is currently used by the New York City Community Air Survey (NYCCAS)—can be used in a comparative manner to identify those road segments that have a relatively higher probability of experiencing peak NO<sub>2</sub> concentrations on a shorter time scale. With NYCCAS, New York City already has the most extensive local air monitoring program of any U.S. city.

EPA risk evaluation documents provide estimated conversion ratios to convert annual average concentrations of NO<sub>2</sub> (like those monitored and modeled by NYCCAS) to short-term maximums relevant for comparison to the standard. Using data collected by NYCCAS over the last five years and collected on an ongoing basis, the City can identify locations in the City that are expected to exceed the NO<sub>2</sub> near-road standard. Initial analyses show that these exceedances are expected to occur in Midtown and Lower Manhattan and along major transportation corridors in Northern Manhattan, Brooklyn and Queens.

Fortunately some progress has been made and, as you know, the City fleet is the cleanest it has ever been. The Administration and this Council worked together to pass a series of laws that require increased fuel economy for on-road City vehicles, the use of biodiesel in all of the City's fleet, the phase-out of older, dirtier vehicles, and the use of clean vehicles by City construction contractors. This combination of regulations has dramatically reduced emissions from the City's fleet as well as requiring all heavy-duty waste trucks that operate in the City to achieve EPA standards for 2007 model year engines by 2020. The estimated average particulate matter emission percentage reduction per vehicle in fiscal year 2011 through fiscal year 2012 is approximately 49 percent.

In addition, the Department of Transportation has an extended pilot project to reduce truck deliveries during the day, when traffic volumes are the highest, and require deliveries at night. Finally, research on anti-idling technologies will mean fewer oxides of nitrogen and a discernible reduction in emissions.

We believe that more investment in these types of approaches that have proven to make progress thus far—making use of available data, strategic collection of additional data and an analysis of potential strategies for pollutant reduction—would be a better use of resources than the monitoring proposed under this bill.

#### Intro. 312

The Administration agrees that air quality alerts and full disclosure of significant public health risks are important issues. This bill proposes to amend DOHMH's authority to require the establishment of an air quality alert response program to be in operation between March 15<sup>th</sup> and September 15<sup>th</sup> of each year. This program would include the creation of a notification registry that allows City residents to sign up to receive notification of air quality alerts by telephone, electronic mail or text message. The alerts must contain certain information and language.

We would first like to note that the legislative findings could be read to imply that New York City has consistently been in violation of the Clean Air Act, which is not accurate. We comply with the Clean Air Act and while New York City is not yet in full attainment of all national ambient air quality standards, we are currently in compliance for most of the standards.

The Administration believes that the goals of Intro. 312 are worthwhile but that they can be met in a more cost-effective way through better promotion to city residents of existing notification and air quality alert systems managed by the State and federal governments. Current levels and forecasts are available from the New York State Department of Environmental Conservation (DEC) (<http://www.dec.ny.gov/chemical/34985.html>), from EPA's AirNOW service (<http://airnow.gov/>), or by calling the New York State Air Quality Hotline (1-800-535-1345). AirNOW also offers subscription services that can provide daily air quality texts or emails for a specific area (at <http://www.enviroflash.info/>). Furthermore, the Notify NYC service provides subscribers with public health emergency messages, including Air Quality Health Advisories based on the advisories issued by DEC. Individuals can either check the websites and social media feeds, download smartphone apps, call a hotline, or sign up for a service that provides current levels and forecasts by email or by text; these services are all free of charge.

Last year New York City had 11 days for which the air quality was designated as “unhealthy for sensitive groups,” which means that the air quality index exceeded 100 and an air quality advisory was issued. Over the last 10 years there has been an average of 27 such days a year, most often for high ozone levels in the summer season. Sensitive groups include those with lung disease, older adults and children who are at a greater risk from exposure to ozone and fine particles, the two most significant air pollutants impacting health in NYC. DOHMH data from the community health survey show that only about one-quarter of NYC adults are aware of these advisories.

We believe that in partnership with the Council, we can do more to promote these existing services. However, we do not believe there is a need to invest additional resources to create a redundant system, especially since the trigger for these alerts comes from DEC data rather than data under the control of New York City. In fact, given the inevitable delays in receipt and re-creation of alerts on any given day, New Yorkers would hear much sooner if they subscribed to directly DEC's hotlines and text services.

Regarding the teleworking requirement, without additional details on possible arrangements under this proposed legislation, the operational impact is difficult to project. There is currently no city-wide telework program for City employees. While city-wide personnel time and leave policy during emergencies authorizes alternative work sites and/or schedules to ensure continuity of operations, telework policies would be subject to collective bargaining for represented employees. This bill would cover all employees, but we comment only on the potential effects on City employees.

Federal law and the City's Human Rights Law require that employers make reasonable accommodations for people with disabilities, which may include individuals suffering from conditions that cause breathing difficulties. A reasonable accommodation includes working offsite. It is important to note, however, that some individuals may actually prefer to come to

work on days with air quality advisories depending on whether he or she has air conditioning at home, relative pollution levels of the home and work environment, and other factors.

With regard to the restrictions that would be placed on refueling of City fleet vehicles, New York City operates one of the cleanest, most sustainable fleets in the nation. The fleet has over 6,000 hybrid and plug-in electric vehicles and operates all its diesel equipment using biodiesel blends. Following the City Council's lead, we are also replacing or retrofitting all of our diesel equipment so it uses diesel particulate filters to contain harmful exhaust. We support efforts and ideas to continue our leading fleet sustainability efforts.

However, a ban on refueling during these times could cause significant disruption to our afternoon and/or night operations. It was mandated in 2000 that all passenger vehicles be equipped with an onboard vapor recovery system for gasoline fumes, and in 2006 for light and medium duty trucks. In addition, City fueling stations are equipped with the same technology, as are most private stations. Given these controls, the air emissions from refueling are minimal.

The bill also raises practical questions about how City operations would be affected by the proposed vehicle and fueling restrictions. First, it is uncertain whether City agencies will be allowed to accept bulk fuel deliveries during air quality advisory days, which could compromise City agency functions, especially during periods of consecutive air quality advisory days. Furthermore, State vehicle and traffic law specifically defines emergency services vehicles; however, thousands of other City fleet units from agencies such as the Department of Transportation, the Department of Parks and Recreation and DEP are used to perform critical functions during emergency periods, including heat alerts. The ability of agencies to perform essential functions could be seriously affected because they do not fall under the State's definition of emergency services vehicles.

We are therefore concerned that the potential operational impacts of barring refueling or restricting fleet operations during heat alert days outweigh any environmental benefit. Restricting our ability to refuel and operate thousands of City vehicles would affect a wide variety of essential City services or require costly overtime to compensate. Topping off all tanks for internal fueling sites and for essential fleet vehicles is one of our emergency preparedness steps for potential blackouts, including during periods of high energy use.

### Intro. 313

It is important to note from the outset that New York State has re-designated the City of New York as being in attainment for PM<sub>2.5</sub>. This achievement is attributable in part to recent air quality regulatory programs, including amendments to mobile-source and boiler regulations. However, we and DOHMH agree that more work is needed to further reduce PM<sub>2.5</sub> pollution in New York City, which continues to cause significant harm to public health even at levels below the National Ambient Air Quality Standard.

Working groups serve an important function in fostering discussion of air policies. DEP has a very successful working group on noise rules, and seeks to import a similar group into the revised Air Code. In this proposed bill, there are a limited number of community groups represented, and those that are included are not necessarily from community boards with the

worst air quality or asthma rates in New York City. In addition, we note that policies in many other sectors, such as transportation, land use, housing, and energy efficiency have implications for air quality. Whatever advisory group is created to make recommendations for clean air policy should represent a broad range of neighborhoods, including the neighborhoods with the worst air quality and asthma rates, and stakeholders from all relevant sectors.

A group like the Sustainability Advisory Board, convened to provide input on PlaNYC but including a broader range of community stakeholders, or a similar body, might be a more effective and suitable approach. This group could propose various strategies the City might employ to address complex air pollution sources, such as traffic. In addition, the group could evaluate control technologies and focus on small-area source permits with a particular focus on environmental justice communities. This function may help to focus on more specific and attainable goals that may help realize the intent of this legislation.

Finally, as a practical matter, this suite of bills requires DEP and DOHMH to promulgate rules within an unreasonably short time frame that does not adequately account for the rulemaking process. The time frames provided do not account for the City Administrative Procedure Act, which at a minimum takes 60 days after the Law Department and Mayor's Office of Operations review and approve the publication of the rule. Moreover, time needs to be provided to respond to comments on the proposed rule, to ensure that the public is able to meaningfully participate in the rulemaking process. Therefore, we strongly recommend an effective date of at least six months after passage.

Going forward, we hope to work with this committee to address these concerns and craft bills that will ensure that we make steady progress toward improving air quality for all New Yorkers. Thank you for the opportunity to testify.