Good afternoon Chairman Richards and Members. I am Emily Lloyd, Commissioner of the New York City Department of Environmental Protection (DEP). I am joined today by Deputy Commissioner for Sustainability Angela Licata, Assistant Commissioner of the Bureau of Environmental Compliance Mike Gilsenan, Gerry Kelpin, Director of Air and Noise Policy and Enforcement, and other DEP staff. Also joining me from the Department of Health and Mental Hygiene is Deputy Commissioner for Environmental Health Daniel Kass.

As this is my first appearance before you and the Committee, Mr. Chair, I would like to congratulate you on your appointment and say that I look forward to a productive working relationship between this Committee and DEP in this new administration. Thank you for the opportunity to testify today on the revision of the New York City Air Pollution Control Code.

Today, New York City's air quality has reached the cleanest levels in more than 50 years, with dramatic reductions in air pollutants. Since 2008, the level of sulfur dioxide in the air has dropped by 69 percent, and since 2007 the level of soot pollution (PM$_{2.5}$) has dropped by 23 percent.

In concert with the active role of the Council in passing important legislation, and with significant feedback from a variety of stakeholders, we have developed sensible regulations that have contributed to this profound improvement in air quality. We have come a long way since the early '70s, when soot regularly obscured the skyline and before the Clean Air Act came into effect. Year-round air quality has benefited from reduced emissions from upwind power plants, industrial sources, on- and off-road diesel vehicle engines, and stationary engines as a result of federal and state regulations. And to address remaining sources of emissions in our densely populated city, we have taken a number of local actions to clean up heating fuel.

An important component of improved air quality in New York City has been a cleaner, more efficient City fleet, achieved through 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 installation of clean diesel retrofits on City fleets, the use of clean vehicles by City construction contractors, adding more hybrid and electric vehicles in the municipal fleet, and reducing emissions from school buses. These improvements have dramatically reduced emissions from the City’s fleet. The estimated average particulate matter emission percentage reduction per vehicle is approximately 49 percent over a two-year period.
Last year, we were also able to make sure that the commercial waste fleet meets the same standards set for the municipal fleet. Commercial waste generated in the City, including construction and demolition waste, is hauled by private operators licensed by the Business Integrity Commission. Citizens see these trucks every day as they provide services in commercial corridors and construction sites across the City.

Pursuant to Local Law 145 of 2013, all heavy-duty waste trucks that operate in the City will now be required to achieve EPA standards for 2007 model year engines by 2020. The PM reduction will be equivalent to taking 27,000 delivery trucks or 1,300 intercity coach buses off the road every year between 2020 and 2030. To address cost concerns expressed by industry stakeholders, who were extensively consulted throughout, this law provides a six-year lead-in time, a financial hardship waiver, and multiple pathways to compliance. Together, these actions are contributing to progress toward meeting the City's clean air targets.

Based on a Department of Health and Mental Hygiene (Health) study using EPA methods, we estimate that in 2005 to 2007, PM$_{2.5}$ levels in New York City contributed to more than 3,100 deaths, more than 2,000 hospitalizations for cardiovascular and respiratory disease, and 6,000 emergency department visits for asthma annually. Today, because of the significant improvements in air quality, Health estimates that every year we are preventing approximately 800 deaths and approximately 1,600 emergency department visits for asthma, and 460 hospitalizations for respiratory and cardiovascular issues. But with PM$_{2.5}$ still causing more than 2,000 deaths annually, we need to do more to reduce local emissions.

This has encouraged us to revisit the New York City Air Pollution Control Code, which has not been substantially revised in 43 years. In the 1970s the City led the way and served as a model for the federal Clean Air Act, but now many elements of the Code are outdated. To reach our shared goal of having the cleanest air of any major U.S. city, the Air Code must be revised.

**Outreach and Engagement**

This revised Code is the product of numerous meetings with business, environmental and civic stakeholders and hundreds of hours over the last four years. Groundwork for the revision of the Code began with a series of meetings with critical stakeholders to develop overarching themes that would be used as a template for the work going forward. Based on these stakeholder meetings, DEP began to draft a proposal with the objectives of (1) updating emission standards, (2) focusing on previously unregulated sources of particulate matter, (3) simplifying compliance requirements for stakeholders, and (4) increasing flexibility to address new and developing technologies.

The DEP code revision team engaged major stakeholders in the private and public sectors, including all relevant City agencies and the Law Department. This same team met with and answered questions from these stakeholders, discussed new issues, and reviewed and revised language as necessitated by the review process. Some of the participants in the process, for example, have been the Council, the Department of Health and Mental Hygiene, the Department of Sanitation, the Business Integrity Commission, the Department of Education, the Department of Citywide Administrative Services, the HVAC industry, the industrial processing sector, the
real estate industry, the food service industry, and environmental advocates. The information derived from these meetings enabled DEP to prioritize the sections of the Air Code that were most in need of revision, and ensure that industry and other sectors are not unduly burdened.

1. **Emission Standards**

During the past 43 years, emissions have been reduced significantly but more improvements are necessary. New York City has the greatest density of both PM emissions and people of any large U.S. city. With many vulnerable groups, exposures to emissions from sources like charcoal broiling and wood burning are of greater concern in New York City than in less-populated jurisdictions. Health standards have also become more stringent. We seek in this revision to further reduce emissions from already regulated sources and to achieve emission reductions from smaller, common sources of pollution distributed throughout the City.

This revised Code will incorporate updated and revised federal and state regulations for emission standards. For example, the complicated table of environmental ratings for stationary sources currently included in the Code will instead refer to the state standards, ensuring that any changes in those ratings are captured in the city regulations without having to pass another bill. Similarly, the Code incorporates other state standards by reference, including the prohibition of certain architectural coatings that do not meet volatile organic compound levels, the emission of nitrogen oxides from boilers, and the method for determining opacity, which we use as a proxy for incomplete combustion when smoke is emitted from various sources including city buildings.

Incorporating standards by reference also allows for the deletion of obsolete and outdated provisions. One of the most notable deletions will be the elimination of standards governing refuse-burning equipment. There will now be a general ban on refuse burning with a few narrow exceptions, such as state-approved medical waste incinerators. It will also narrow the exemption that permitted the Department of Sanitation (DSNY) to install new refuse-burning equipment. Equipment operated by or on behalf of DSNY used in connection with solid waste disposal or processing for energy generation or other resource recovery will be exempt. Examples of resource recovery may include non-incineration gasification or anaerobic digestion, which do not themselves produce emissions from a stack.

2. **Previously Unregulated Sources of Particulate Matter**

The revisions of the Code over the last 43 years have been limited in scope and focused primarily on the reduction of particulate matter from large sources, including residential and commercial fuel combustion, as well as non-road and on-road diesel emissions. The regulation of these large sources now allows the City to focus on smaller, localized sources throughout the City, which, viewed as a whole, contribute a significant amount of particulate matter. These sources include commercial charcoal broilers, coal- and wood-fired ovens, and fireplaces. Focusing on these sources will reduce particulate matter emissions, which will ultimately save lives. For example, commercial charcoal broilers throughout the five boroughs emit an estimated 1,400 tons of particulate matter per year. Health estimates that those emissions contributed to more than 12% of PM2.5-attributable premature deaths annually in 2005 to 2007 or 400 deaths per year in that period; if all commercial charcoal broilers had had control technology installed, the reduction in
ambient PM$_{2.5}$ concentrations could have prevented nearly 350 of these premature deaths each year.

The revised Air Code will require that all new char broilers that cook large amounts of meat, i.e., more than 875 pounds of meat a week, have control devices. Some control technology is already available for a certain type of char broiler and can be installed quickly and at a reasonable cost; that type of technology will be required immediately. For the larger, more complex char broilers, the control technology is still being developed and is currently quite costly. Therefore, the Code will allow affected entities additional time to install such devices. Similarly, all new commercial coal- and wood-fired ovens will have to install control technologies, while existing establishments will be given additional time to comply. This will ultimately reduce localized residential exposure to particulate matter generated by wood- and coal-burning ovens while still allowing the food service industry to cook all the foods that New Yorkers love.

This bill will also regulate fireplaces. As a fuel source, wood is more polluting than coal unless controlled. Smoke resulting from improperly burned wood contains many chemical substances that are considered harmful, such as hazardous air pollutants, fine particles, polycyclic aromatic hydrocarbons, and volatile organic compounds. Particle pollution from burning wood, like particle pollution from other fuel combustion, can harm the health of children, the elderly, and those with existing cardiovascular and respiratory diseases. The Code revision will prohibit the installation of any new wood-burning fireplaces and require all new fireplaces in the City to operate only on natural gas or renewable fuels. Existing fireplaces will still be permitted to burn wood but the moisture content of wood burned must be twenty percent or less as drier wood burns cleaner than wood with high moisture content. The new Code also provides that fireplaces cannot be used as a primary source of heat.

In addition to their contribution to fine particle pollution across the city, the odors and smoke generated by these previously under-regulated emission sources are often the cause of complaints throughout the City. The revised Code will strengthen the City’s regulation of these localized nuisances to more effectively address sources of emissions that cause discomfort to New Yorkers. Requiring control technology will help reduce complaints and City resources devoted to responding to them while continuing to protect the health of New Yorkers.

3. **Simplified Compliance Requirements**

The revised Code will simplify compliance requirements for stakeholders and streamline the DEP permitting process. In both the existing and the revised Code, all boilers are required to obtain either a registration or a certificate of operation based on the size of the boiler. Getting a certificate of operation is a more involved process than getting a registration, so we are raising the threshold for equipment that will require a certificate. In the existing Code, the size range of boilers that require a certificate of operation was based on the fuel choice and emission ratings of boilers from more than 40 years ago.

The new Code will increase the threshold for boiler certificates of operation from 2.8 million Btu per hour to 4.2 million Btu per hour. The higher registration threshold, along with a new online permitting program, will make it easier for applicants to file and receive registrations. These
changes will reduce the work permit turnaround time by approximately 25 percent and ease the burden on building owners.

Due to a variety of advancements since the 1970s and further changes in this bill, we do not predict that increasing the size range for equipment that will now need a registration will negatively affect the environment. Boilers are now required to burn cleaner fuel under DEP’s clean heating fuel rules. Moreover, we believe that the engineering audit program, combustion efficiency, and enforcement efforts will be adequately protective. Additionally, owners of boilers requiring a registration will now also have to certify that the boiler passed a combustion efficiency test. This test will ensure the boiler is optimized for efficient performance: malfunctions will be detected sooner, and the boiler will be tuned and repaired faster. More-efficient combustion in the City will result in decreased fuel use, which will reduce costs for building owners while also reducing overall pollution.

4. Increased Flexibility

The new Code will create greater flexibility by enhancing rulemaking authority. It has been difficult to accommodate certain advances in technology under the existing Code, which does not allow for the use of certain cost-effective controls, as they were not contemplated in 1970. Many areas in the revised Code establish broadly defined emission controls, but also add language to allow the City to adopt the related implementation methods and standards by rule. This will help us to more quickly adapt to changing technologies by going through the rulemaking process rather than having to revise the Administrative Code. For example, as I previously mentioned, existing coal- and wood-fired ovens will be required to have control technology in the future. The Code will now allow environmentally beneficial, cost-effective controls to be approved by rule as they develop. And stakeholders will have more flexibility to choose appropriate control technologies.

5. Recommended Amendments

We recognize that further amendments will need to be made and we look forward to working with the Council to make sure that concerns raised by industry stakeholders are addressed. For example, we will continue to consider a committee that will allow for continued dialogue with sister agencies and stakeholders when a rule authorized by the Code requires the inclusion of a mitigation strategy or method to reduce emissions.

An important change that the Administration is proposing is to section 24-163.9, relating to City school buses. The intent of Local Law 61 of 2009 was to ensure that all Type A and B buses (smaller buses) would be retrofitted with a closed crankcase ventilation system (CCVS); however, based on a spatial-constraint issue, such buses could not be retrofitted and only 2007 and later buses were equipped with such technology. The proposed code change would require pre-2007 Type A and B school buses to be gradually phased out from the Department of Education fleet, with all buses utilizing a CCVS by September 1, 2020.

In closing, I appreciate your consideration of this important and overdue update of the New York City Air Pollution Control Code. With the help of our stakeholders we have crafted a
comprehensive revision of the Code that will simplify and improve compliance with existing regulations without compromising quality of life and the environment—a true step toward a more sustainable city. Together, the de Blasio Administration and the City Council can take this next important step to ensure that we are providing future generations with a vibrant and healthy city that is prepared for a million new residents by 2030. I look forward to your support in updating the Air Code and to cleaner air for all New Yorkers.