

Reducing Air Pollution/Improving Air Quality(?) at the Local Level

May 24 & 25, 2017

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The City's Air Pollution Control Code



Air Code revisions to conform to state and federal standards to reduce emissions and address localized air quality impacts.

- Incorporate new standards from DEC to be consistent with the allowable emissions of particulates from various areas including boiler emissions and air contaminant ratings.
- Clarify and remove outdated standards to reflect current emission standards for emission testing including smoke tests and fuel burning equipment.
- Limiting emissions from unregulated sectors with cost-effective controls.
- Simplify compliance requirements and streamline permitting.
- Enhance rulemaking authority to create greater flexibility for the City.
- Further reduce emissions from residential and commercial heating fuel oil sources.

Reducing Emissions One Pollutant at a Time-Mobile Sources



➤ Mobile Sources

- Attaining the CO standard –Intersection by intersection solutions, improving traffic flow to accommodate development, reducing congestion, improving mass transit, cleaner gasoline standards for cars, change in fuel standards to address volatility.
- PM Sources under City's Control Several laws have been passed to require the City fleet and vehicles that are owned, operated, or leased by a city agency, or requires a permit from a city agency shall use ULSD, biodiesel, and BAT to reduce PM. Such vehicles include sight seeing buses, school buses, and recyclable materials contracts. In FY 15, there was a decrease of 33% PM emissions in the City fleet or 9 tons of PM reduced with the 2007 .01g/bhp-hr std and 14 tons with the 85% BAT reduction of .015g/bhp-hr std.
- PM 2.5 NAAQS attained in the City.

Reducing Emissions One Source at a Time



- Stationary Sources
- Incinerators- Burning household waste in building incinerators was once the way refuse was disposed of. These incinerators were phased out in the1990s. Large scale incinerators were heavily regulated, burning primarily only infectious waste, and most recently energy generation was added as permissible refuse burning.
- Boilers- In 2012, the city passed regulations to phase out Number 6 heating oil primarily by 2015. Approximately 750 tons of PM 2.5 reduced
- Stationary engines- Revisions to the Air Code not only incorporates federal standards that require reciprocating internal combustion engines permitted for the first time to be certified to Tier IV emission standards on January 2018 but requires existing ones to comply by January 2025.

The Balancing Act



- ➤ Criteria Pollutants and GHG Reductions; City efforts to reduce GHG-the City committed itself to reducing GHG emissions by 80 percent by 2050 (80 x 50).
- ❖ Tools:
- ☐ Technological Advancements
- Transportation and energy
- Boiler Efficiency
- Source controls
- Control devices on previously unregulated sources
- ☐ Renewable Fuels
- Air Code added renewable biomass that can be used as clean heating oil.
- □ Efficiencies
- Energy conservation measures in buildings
- ☐ Fuel Changes
- Requirements to use biodiesel in city fleet and all buildings
- Move to Natural gas and Number 2 fuel oil in boilers no later than 2030

Data Gaps



- ➤ Monitoring the Fuel Oil Change
- Collection of data pre and post fuel switch
- ➤ Verify SIP Modeling Results
- ➤ How do NYC Emissions Influence Ozone Formation?

Next Steps



- ➤ Interagency Cooperation to quantify emissions
- Enhanced sharing of data and policy initiatives to achieve better air quality in the face of shrinking resources.

Integrate large-scale renewable resources directly into New York City's supply mix. Evaluate the technical and financial feasibility, as well as the benefits, of direct links between the electric system in the city and different types of renewable resources.