



Testimony

of

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before

New York City Council Committee on Environmental Protection

concerning

Indoor Air Quality: the Regulatory Landscape

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250 Broadway
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Good morning, Chairman Gennaro and Members of the Environmental Protection Committee. I am Nancy Clark, Assistant Commissioner for the Bureau of Environmental Disease Prevention at the New York City Department of Health and Mental Hygiene. Thank you for the opportunity to testify today on Indoor Air Quality. I am joined today by Chris D'Andrea, Deputy Director of the Health Department's Office of Environmental Investigations and Alyssa Preston from the Department of Environmental Protection.

In my testimony, I will provide an overview of pollutants that impact indoor air quality (IAQ), approaches to optimizing air quality in indoor environments, and agency roles in addressing IAQ concerns in New York City.

Background

Indoor Air Quality refers to the condition of air inside a home, school, workplace or other building environment. Indoor environments are highly complex and building occupants may be exposed to a variety of gaseous or particulate contaminants. Indoor air pollutants can be generated inside a building or enter a building from outdoor sources.

Contaminants that are generated in one part of a building can migrate to other parts through ventilation ducts, cracks and crevices, and natural openings such as windows and doors.

- Contaminants inside a building may be generated from a variety of sources, such as: household and commercial chemicals (like cleaning products, paints, adhesives, lubricants, pesticides and air fresheners); tobacco smoke; building materials; such as pressboard, furniture and carpeting; combustion products from cooking stoves and other fuel burning equipment; water-damaged building materials and microbial growth; and contaminants released by co-located business processes (for example, dry cleaners, print shops, and auto body repair shops).
- Outdoor pollutants that can enter a building include vehicle exhaust, smoke from fires, industrial emissions, chemical spills, construction and demolition activities, or tracked-in dirt.
- Poor ventilation may lead to buildup of odors and pollutants, uncomfortable temperature and humidity, and condensation.

Approaches to Optimizing IAQ

While some indoor air quality conditions can be associated with health effects (such as carbon monoxide poisoning or irritation from volatile organic compounds in paints), there is limited science and testing methods available for fully understanding the impact of indoor air quality on health. Despite uncertainty about what to measure and how to interpret what is measured, research shows that building-related symptoms are associated with building characteristics, including dampness, cleanliness, and ventilation characteristics.

The best way to protect people from exposures to indoor pollutants is to prevent or minimize exposure in the first place. Building owners can use several approaches, alone or in combination, to optimize indoor air quality, including:

- Installing and maintaining well-designed ventilation systems inside buildings.
- Identifying and substituting hazardous products with safer ones.
- Minimizing the amount of chemical products used.
- Using low-VOC (volatile organic compound) paints, adhesives, floor finishes and cleaners.
- Using building materials, such as carpets and furnishings with low off-gassing potential
- Restricting use of chemicals in businesses co-located in residential premises (such as the EPA 2020 phase out of perchloroethylene in co-located dry cleaners).
- Prohibiting tobacco use (NYC Smoke-Free Air Act)
- Implementing good building practices, such as using green cleaning products, repairing leaks and keeping buildings dry, and installing entry mat systems to capture particulates from foot traffic.

Addressing Indoor Air Quality Concerns

I would now like to review the City's current procedures for addressing indoor air quality and responding to complaints.

The City's response protocols to IAQ concerns allow for various types of responses depending on site-specific factors. Both the Health Department and DEP respond to IAQ complaints from the public. The Health Department receives IAQ complaints in residences and some other buildings. DEP responds to complaints that are related to impacts from emissions to outdoor air. Worker complaints are generally handled by federal and state worker protection agencies. Indoor air contaminants related to soil vapor intrusions are addressed by state agencies.

The New York City Health Code authorizes the City's Health Department to respond to complaints about public health nuisances, including investigating indoor air problems and ordering correction of nuisance conditions. The Office of Environmental Investigations (OEI) responds to complaints received by the Health Department. Each year, OEI receives over 6,000 complaints related to odors, carbon monoxide, dry cleaners, asbestos, construction dust, soot from boilers and other indoor air issues. As part of the City's overall approach, the Department provides education and guidance on how to address concerns about indoor air quality. Depending on the nature of the complaint, OEI may visit the building to investigate the problem or contact the building owner and may require the owner investigate and correct the problem. Responsible parties that do not comply with Health Department orders are subject to violations and fines.

The Department of Environmental Protection addresses impacts from emissions to the outside air and responds to complaints about construction activities and other outdoor sources of air pollution. DEP enforces the City's Air Code and requires certain businesses to restrict air emissions and to obtain permits for operation of certain chemical processes. For example, DEP requires all dry cleaners that use perchloroethylene (PERC) to obtain an air permit. The New York State Department of Environmental Conservation also regulates dry cleaners that use perchloroethylene, requiring these businesses to use specific equipment and safe work practices to prevent exposures to building occupants, and have a trained operator.

In summary, the Health Department and DEP have in place comprehensive and flexible protocols for responding to complaints related to indoor air quality in occupied buildings. In addition to these City resources, there are numerous tools and guidance documents available to the public on preventing and addressing air quality problems from federal, state and local agencies, including the EPA, State Department of Health, and Department of Health and Mental Hygiene.

We appreciate the opportunity to testify and happy to answer questions you may have.