

Testimony of Angela Licata
Deputy Commissioner for Sustainability
before the
New York City Council Committee on Environmental Protection
concerning
Intro. 420 – Mitigation of Construction Noise within 75 feet of a school
City Hall – Committee Room
June 25, 2015, 1 pm

Good afternoon, Chairman Richards and Members of the Committee. My name is Angela Licata, Deputy Commissioner for Sustainability at the New York City Department of Environmental Protection (DEP). I am joined today by Associate Commissioner for Public Affairs Eric Landau, Assistant Commissioner for Environmental Compliance Michael Gilsean, as well as other DEP staff. Thank you for the opportunity to testify on Introduction 420.

As you know, DEP's mission is to protect public health and the environment by supplying clean drinking water, collecting and treating wastewater, and reducing air, noise, and hazardous materials pollution.

Introduction 420 proposes to mandate that the noise mitigation plan for construction sites within 75 feet of any receiving classroom in any public or private preschool or primary or secondary school shall provide that noise shall not exceed 45 dB (a) (decibels) during normal school operating hours and that noise levels at school sites must be continuously monitored during normal school operating hours.

DEP supports the intent of this legislation, which is clearly aimed at providing a quiet learning environment for our City's school children. However, we have some technical questions about the legislation's implementation. As currently written, the legislation does not take into account the variability of sound levels within and outside of buildings, including schools. There are likely to be situations where the sound level in a classroom at different times of the day will be above 45 decibels without any construction activity. With that in mind, it is not clear how this legislation would apply to those cases. A similar concern relates to a situation where the sound level rises above 45 decibels from non-construction related sources outside of the classroom. Traffic, emergency sirens, loud car stereos, airplanes, buses, the subway, or even a passing ice cream truck with its jingle playing could increase the sound level to something greater than 45 decibels. Typically, an equivalent noise level (Leq), which is basically the average of all of the sound energy over a selected period of time, is used to represent the average noise level for the period. In general, the temporal pattern of noise may be continuous, variable, intermittent, or impulse and it may not always be possible to ascertain the source or sources that are contributing to the levels.

Conceptually, an alternative approach worth further consideration is to prohibit the noise from construction activities from raising the ambient decibel level above a certain threshold in any receiving classroom. While this may be complicated, the key is defining a methodology for determining the ambient sound level that would rely on sound measurements at the affected school before the construction begins. Some of the predictive and modeling techniques used in

environmental impact statements could certainly form a basis for defining the methodology. Factors that would need to be considered would include:

- The selection of representative classrooms throughout the building;
- Whether the windows would need to be opened during the construction period;
- Period of time that the monitoring will occur and whether to average the decibel levels obtained during each period of time.

We believe it would be beneficial to further discuss the specifics with the Committee. In addition, we suggest including a provision requiring the contractor or developer to conduct noise monitoring prior to construction commencing, as well as during construction. We also suggest that the level of detail for monitoring requirements, as well as the definition of ambient noise level, either be spelled out in the legislation or provided for by rule.

We recognize that the legislation would also require some changes in the construction noise mitigation rule. A specific process would need to be developed to allow the contractor to demonstrate how much the construction site mitigation measures reduce the sound levels reaching the school site, and if additional mitigation measures are needed to preserve the classroom sound level. One scenario would require that on-street monitoring occur throughout different parts of the day, as noise fluctuates and conditions such as traffic patterns change prior to construction beginning. By taking readings outside, a plan can be developed to mitigate the sound that travels into the classroom. Once an average baseline is established, the contractor would be able to best design for the techniques and strategies to implement a sound mitigation plan.

Over the years, DEP has had good success working with contractors and coming up with creative solutions to significantly reduce construction-related noise. Using quieter equipment, as well as additional mitigation techniques such as noise barriers, will be required when construction work is planned near sensitive receptors including, but not limited to, schools.

Finally, we also suggest working with the Council to look at revising the design of a monitoring component from a requirement for continuous monitoring within the classroom to monitoring outside the school or the construction site during construction that would still be protective of the learning environment. The premise here is that all of this work will lead to the installation of sufficient noise mitigation techniques to insure that the sound level in the classrooms stays within the limits that will be determined. Monitoring sound levels should only need to be used to confirm that the techniques are working and to confirm that changes in the construction activities have not reduced the effectiveness of the mitigation. A contractor could choose to use a handheld instrument to check the sound level or could contract with a company to install equipment that could simply send an alert if the sound levels were approaching a certain level. Communication between the school and the contractor is also a very effective way of monitoring.

Again, we firmly support the intent of the proposed legislation, and believe that providing a certain amount of flexibility is an important component in achieving that intent. We look forward to working with the Committee and further discussing some of these approaches in the very near future in an effort to find workable solutions to mitigate noise in and around our schools. Again, I thank you for the opportunity to testify today, and would be happy to address any of your questions.