## **Blast Exceedances:**

When explosives are detonated in the rock, the energy is absorbed by the rock and splits. There is always some energy left over which is converted into vibration and travels away from the site through the ground and the air. The vibration through the air is known as "air overpressure". Its peak level is measured in terms of decibels (dba). Air overpressure limits are set very conservatively.

Per Community Board 8's request, the following lists those dates on which there were air overpressure exceedances resulting from a Second Avenue Subway construction blast for the 72nd Street station cavern through April 5<sup>th</sup>:

Feb 11, 2011 - seismographs below 0.5 in / sec - air overpressure exceeds 140 dba vs 133 dba allowable

Feb 18, 2011- seismograph below 0.5 in/sec - air overpressure exceeds 136 dba vs 133 dba allowable

Mar 3, 2011 - seismograph below 0.5 in/sec - air overpressure exceeds 136 dba vs 133 dba allowable

Apr 4, 2011 - Blast occurred at 4:21 PM, however, due to a technical issue in the field none of the seismograph readings in the street were recorded. The level of vibration and overpressure was observed by field personnel and believed to be comparable to that of March 3.

Please note that our contractor is taking the following steps to stay within allowable limits:

- 1) Modifying shaft blast cover for a more controlled release of blast pressure.
- 2) Modifying drill hole pattern and stemming of the holes to absorb more blast in the rock face underground.

In addition, the muck enclosures being built on Second Avenue at the 69<sup>th</sup> and 72<sup>nd</sup> Street shafts will reduce the effects of the blast overpressure on adjacent buildings.

## Lexington Avenue/63<sup>rd</sup> Street:

See attached for the maintenance and protection of traffic plan for the next three months.

We will begin tree removal on the northwest and southwest sides of 63<sup>rd</sup> Street and Third Avenue on Thursday, May 26<sup>th</sup>. A total of seven trees will be removed; of the seven trees, one will be transplanted. As work progresses, additional trees will need to be removed. We are leaving trees in place until such time as that location is needed for construction.

## After-hours calls

We are finalizing a plan to provide an after-hours number to report an immediate safety concern or to report work and/or noise outside of regular work hours. We will notify the Community Board and community when this is implemented.

