



## New Jersey Noise Control Council Portable & Stationary Emergency Generator Consumer Fact Sheet

With the extensive use of Emergency Generators (EG) it has become apparent that consumers may not be aware that their new or existing generator may be exceeding permissible sound limits on a complainant's property. The following information is provided by the New Jersey Noise Control Council to assist consumers in choosing a quieter generator and installing it in a manner to minimize the possibility of exceeding the permissible noise limits.

**Safety Advisory** – At no time should an EG be operated inside a building, garage, basement, crawl space, motor vehicle or any other enclosed area which could trap and elevate deadly Carbon Monoxide levels. Consumers should always read the EG manual and can also consult other materials for safe operation such as the ones provided by National Fire Protection Association (NFPA) "[Generator Safety Tips](#)", NFPA 110, "Standard for Emergency and Standby Power Systems", and Occupational Safety & Health Administration (OSHA) "[Portable Generator Safety](#)".

**Choose Quiet EGs** – Buyers should make their best effort to determine the noise rating of the available EGs and purchase the quietest possible unit for their needs. Manufacturers generally test their EGs at 7 meters (23 feet). When comparing EG sound levels be sure the test distances are the same, as some manufacturers use other distances, and sound levels will change with distance. As the distance doubles, the decibel (dB) level will decrease by 6 dB. For example 72 dBA at 23 feet will be 66 dBA at 46 feet.

**Limit Duration of Use** – Be a good neighbor by respecting night time hours when most people are sleeping between 10:00 p.m. and 7:00 a.m. Consider turning EGs off during periods when most people are sleeping. Using the EG intermittently during the day will limit exposure to most neighbors and avoid the presence of a continuous noise source.

**Communicate with Neighbors** – Discuss the placement and hours of operation of your EG with your neighbor before installation. Consider offering them use of your EG power.

**Location and Permitting** – Consult with your local code officials (e.g. Planning, Zoning and Construction) regarding EG placement and permit requirements.

**Enclosure/Barrier**– Properly designed, well ventilated and placed enclosures or barriers can significantly reduce noise exposure to you and your neighbors. Appropriate construction materials include cinder block or plywood with sound absorbing treatments, such as acoustic panels. Be certain that all construction materials are properly fire-rated for your purpose and appropriate for exterior installation. A house, garage or shed between your neighbor and generator can serve as a noise barrier and can reduce sound levels reaching neighboring properties. If the EG is placed too close to a barrier, reflection can increase sound levels if the generator is on the same side of the barrier as the neighbor. Leave at least 3 feet (or manufacturer guidance) between the barrier and the EG to reduce reflected sound and risks of overheating and the potential for fire.

**Regulatory Statement** – The permissible noise limit for daytime (7:00 a.m. to 10:00 p.m.) use is 65 dBA, as measured at or within a complainants' property line, and the limit for nighttime (10:00 p.m. to 7:00 a.m.) use is 50 dBA. Violations of these limits can result in daily fines of up to \$3,000.00 per violation for businesses and up to \$2,000.00 for residents. Other regulations, ordinances and statutes may apply.

### **Helpful Links:**

<http://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards?mode=code&code=110>

<http://powerupgenerator.com/portable-generator-noise-control-reduction/>

<http://alternate-power-solutions.com/need-a-quiet-generator-take-steps-to-sound-proof-yours/>

<https://www.zombie-box.com/>

<http://www.nooutage.com/powershelteri.htm>

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