

**LONDONDERRY TOWNSHIP  
DAUPHIN COUNTY, PENNSYLVANIA**

**ORDINANCE NO. 2021-06**

**AN ORDINANCE TO AMEND THE CODE OF ORDINANCES OF THE TOWNSHIP OF LONDONDERRY, CHAPTER 10, HEALTH AND SAFETY, TO EXPRESSLY ESTABLISH NEW REGULATIONS ON PUBLIC SAFETY RADIO AMPLIFICATION SYSTEMS; TO PROVIDE FOR THE SEVERABILITY OF THE PROVISIONS THEREOF; AND TO PROVIDE FOR THE EFFECTIVE DATE THEREOF.**

**WHEREAS**, the Londonderry Township Board of Supervisors previously duly enacted the Code of Ordinances of Londonderry Township, Dauphin County, Pennsylvania pursuant to its statutory authority under the Second Class Township Code, *as amended*, 53 P.S. §65101, *et seq.*,

**WHEREAS**, since its adoption, the Board of Supervisors has from time to time duly amended the Ordinance; and

**WHEREAS**, the Board of Supervisors has met the procedural requirements of the Second Class Township Code and of the Township’s ordinances for the adoption of the proposed ordinance, including notice and review; and

**WHEREAS**, the Board of Supervisors of Londonderry Township, Dauphin County, Pennsylvania amends Chapter 10 (Health and Safety), to add Part 2 (Public Safety Radio Amplification Systems). Included in Part 2 are sections addressing Purpose (§ 10-201), Definitions (§ 10-202), Applicability (§ 10-203), Radio Coverage and Amplification System Requirements (§ 10-204), Testing Procedures, Qualifications of Testing Personnel and Proof of Compliance (§ 10-205), and Violations and Penalties (§ 10-206).

**WHEREAS**, the Board of Supervisors, after due consideration of the proposed Ordinance Amendment at a duly advertised public meeting, has determined that the health, safety, and general welfare of the residents of Londonderry Township will be served by the proposed Ordinance amendment.

**NOW THEREFORE**, it is hereby ordained by the Board of Supervisors of Londonderry Township, Dauphin County, Pennsylvania, that the Code of Ordinances of the Township of Londonderry is amended to add the following language to Chapter 10:

**SECTION 1. “CHAPTER 10. HEALTH AND SAFETY.**

**Part 2 PUBLIC SAFETY RADIO AMPLIFICATION SYSTEMS**

§ 10-201      Purpose

1. The Township has determined that certain buildings and structures may not be able to accommodate communications among police, fire and emergency medical personnel who may be called to the premises of such buildings and structures to respond to public safety situations due to the large size of the building or structure and/or other characteristics of the construction or design of the building or structure.
2. The purpose of this Part is to provide minimum standards to ensure a reasonable degree of reliability for emergency services communications from within certain buildings and structures located within the Township to and from county emergency communications centers.
3. The Township Code Enforcement Officer is authorized and designated to carry out the responsibilities and duties stated herein.

§ 10-202      Definitions

1. General - If a term is not defined by this Part, but is defined by the Zoning Ordinance (Chapter 27), the provision of that ordinance shall apply to this Part.
2. Specific Terms - The following words, terms, and phrases, when used in this Part, shall have the following meanings ascribed to them unless the context clearly indicates otherwise:

**Adequate Radio Coverage** – A Minimum Signal Strength available in 95% of the area of each floor of the building or structure to enable two-way portable radio transmissions when transmitted to the closest Emergency Communications System utilizing the 700/800 MHz, VHF, UHF R1 and UHF R2, or other frequency band/range as approved by the Emergency Communications System

**Basement** - A story partly underground but having 1/2 or more of its height above the average level of the adjoining ground

**Emergency Communications System (“ECS”)** - Dauphin County Department of Public Safety Radio System and the Pennsylvania State Police Radio System utilized to dispatch and allow communications between police, fire and emergency medical personnel

**Minimal Signal Strength** – The minimum inbound signal strength of -95 dBm (milliwatts) or as set forth by the Dauphin County Department of Public Safety for its Emergency Communications System, sufficient to provide usable voice communications throughout the coverage area. The inbound signal level shall be sufficient to provide not less than a Delivered Audio Quality (DAQ) of 3.4 or an equivalent Signal-to-Interference-Plus-Noise Ratio (SINR) applicable to the technology for either analog or digital signals.

**NEMA** – The National Electrical Manufacturer Association

**Occupant Load** – the total number of person who may occupy a building or portion thereof at any one time.

**Subbasement** – a floor or floors below a basement.

§ 10-203      Applicability

The provisions of this Part apply to any new building permits that are issued on or after the effective date of this Part for the following:

- A. New buildings equal to or greater than thirty-two thousand (32,000) square feet;
- B. Existing buildings equal to or greater than thirty-two thousand (32,000) square feet when modifications, alterations or repairs made within any twelve (12) month period exceed fifty percent (50%) of the value of the existing buildings;
- C. Existing buildings equal to or greater than thirty-two thousand (32,000) square feet when the usable floor area is expanded or enlarged by more than fifty percent (50%);
- D. All buildings with basements or subbasements where the occupant load is greater than fifty (50), regardless of the occupancy;
- E. Hospitals;
- F. Nursing or Convalescent Homes;
- G. Schools;
- H. Buildings with high concentrations of steel, machinery or concrete;
- I. Any building or structure where it is determined by the Township or Fire Code Official that a radio coverage system is required.

§ 10-204      Radio Coverage and Amplification System Requirements

- 1. No person shall erect, construct or modify any building or structure or any part thereof, or cause the same to be done, which fails to support adequate radio coverage and minimal signal strength for firefighters, police officers and emergency medical personnel. Inadequate radio coverage or signal strength shall be deemed to render such buildings or structures or any parts thereof unsafe.
- 2. If it is determined that the characteristics of buildings and structures identified in Section 10-203 (Applicability) are such that the buildings or structures do not allow adequate radio coverage and minimal signal strength, the owner(s) and/or building contractor shall install FCC-certified bidirectional amplifier(s) in or on the building or structure to remedy the

communications problem and reach the coverage criteria set forth in this Part.

3. When buildings and structures are required to provide amplification systems to achieve adequate radio coverage and minimal signal strength, they shall be capable of operating on an independent battery and/or generator system for a period of at least 12 hours without external power input. The battery system shall automatically charge in the presence of external power input. There shall be no connectivity between the amplification system and fire alarm system.
4. Generator systems used to provide secondary power for a fire alarm system or an amplification system shall comply with NFPA 70 and NFPA 100 standards for emergency and standby power systems and the installation of such systems.
5. Any bidirectional amplifier unit shall be enclosed in a cabinet with suitable access for servicing the unit. If installed in outdoor or unprotected locations, the cabinet shall be weatherproof stainless steel meeting NEMA standards for weatherproof installations.
6. The bidirectional amplifier unit shall be installed in a secured environment to prevent tampering. This requirement may be met by the use of a lock on the cabinet or by installing the unit within a secured room.
7. Only authorized radio communications technicians are permitted to make adjustments to amplification systems and associated equipment.
8. Firefighters, police officers and emergency medical personnel shall have access to the equipment at all times. A Knox-Box® is required for any building or structure which is required to have radio amplification equipment under this Part.

§ 10-205      Qualifications of Personnel, Testing Procedures and Proof of Compliance

1. The minimum qualifications of the system designer and lead installation personnel shall include both of the following:
  - A. A valid FCC-issued General Radio Operators License.
  - B. Certification of in-building system training issued by a nationally recognized organization or school OR Certificate issued by the manufacturer of the equipment being installed.
  - C. The aforementioned qualifications shall not be required if demonstration of adequate skills and experience satisfactory to the Township or Fire Code Official is provided.
2. Personnel conducting radio system tests to determine if a building or structure allows for adequate radio coverage and minimal signal strength shall be qualified to perform the work. All tests shall be documented and signed by a person in possession of a current technician certification/license. All test records shall be retained on the inspected premises by the building owner and a copy submitted to the Township.
3. Testing Procedures:

- A. Upon completion of construction of a new or existing building or structure identified in Section 10-203 and at such time as the commercial structure shall become fully operational, it will be the building owner's responsibility to have the communication system tested to ensure adequate radio coverage and minimal signal strength on each floor of the building or structure. Said test will be conducted within 30 days of issuance of a Certificate of Use Permit from the Township. For multitenant buildings, this test shall be conducted within 30 days of the occupancy of 50% of the total building area or at such time as deemed necessary by the Township.
- B. Each floor of the building shall be divided into a grid of 12 equal areas. A maximum of two nonadjacent areas will be allowed to fail the test. In the event that three of the areas fail the test, in order to be more statistically accurate, the floor may be divided into 24 equal areas. A maximum of four nonadjacent areas will be allowed to fail the test.
- C. After the second area test, if the building continues to fail, it will be the building owner's responsibility to have an amplification system installed and tested to meet the adequate radio coverage and minimal signal strength requirements.
- D. The test shall be conducted using public safety portable radio, or equivalent portable radios, talking through the ECS. A spot located approximately in the center of a grid area will be selected for the test, then the radio will be keyed to verify two-way communications to and from the outside of the building through the ECS. Once the spot has been selected, prospecting for a better spot within the grid area will not be permitted.
- E. If the newly constructed building fails the test, it will be the building owner's responsibility to bring the building or structure into compliance with this Part at the owner's sole expense within 90 days from the date such work is contracted and within 90 days of the date of the determination of noncompliance of the building or structure with this Part.
- F. The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified each year during the annual tests. In the event that the measurement results become lost, the building owner will be required to rerun the acceptance test to reestablish the gain values.
- G. Compliance with the provisions of this section shall be a condition on the Certificate of Use Permit issued by the Township. Failure to comply with these provisions shall result in the suspension of a Certificate of Use Permit from the Township.

#### 4. Annual tests.

- A. When an in-building radio system is required, it shall be the building owner's

responsibility to have all active components of the system, such as amplifiers, power supplies and backup batteries, tested to a minimum of once every 12 months. The annual test results shall be supplied to the Township within 18 months next following the original technical certification.

- B. Amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance. Backup amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance.
- C. Backup batteries and power supplies shall be tested under load of a period of one hour to verify that they will properly operate during an actual power outage. If within the one-hour test period, and in the opinion of the testing technician, the battery exhibits symptoms of failure, the test shall be extended for additional one-hour periods until the integrity of the battery can be determined.
- D. All other active components shall be checked to determine that they are operating within the manufacturer(s) specifications for the intended purpose.

§ 10-206      Violations and Penalties

1. The Township has determined that the construction and maintenance of any building or structure, or part thereof, that interferes with ECS and public safety personnel's ability to communicate with such system constitutes a nuisance, per se, because it threatens the health, safety and welfare of the residents and visitors to Londonderry Township. In addition to any other remedies or enforcement procedures provided herein, the Township may seek an injunction to restrain such a nuisance.
2. To the extent that the Township determines that bidirectional amplifiers must be installed in a building in accordance with this Part, the Township shall give notice to the owner(s) of such buildings to install the required bidirectional amplifier. In the event the owner fails to install the required amplifier that meets the requirements of Section 10-205, within 30 days from the date of said notice, the Township shall bring an enforcement action before the District Judge.
3. If any required bidirectional amplifier becomes inadequate or inoperative thus affecting the safety of a building, structure or the occupants therein, the Township shall order the system, unit or device to be repaired or upgraded as necessary and returned to service within 30 days. It shall be the responsibility of the building owner to make repairs, alterations or additions to maintain operability of the system.
4. Any person who violates any provision of this article shall be subject to a fine not to exceed \$1,000, plus costs of prosecution, including attorneys' fees incurred by the Township. Each day that the violation of any provision of this article continues shall be a separate violation unless it is determined that a good-faith basis existed for the violation, in which case there shall be deemed only one violation until the fifth day following the violation. Thereafter, each day shall constitute a separate violation.

5. Should any person refuse, neglect or fail to comply with any provision of this article or with any notice given in conformity with or pursuant to the provisions hereof, the Township may cause the system, unit or device to be repaired or upgraded as necessary at the owner's sole expense. The cost and expense thereof shall be certified to the Township Solicitor, who shall enter the same as a lien against the property and shall proceed to collect the same in like manner as other municipal claims are by law collectible.”

**SECTION 2. Repealer.**

Unless specifically stated in this Part, all ordinances or parts of ordinances inconsistent herewith or in conflict with any of the specific terms enacted hereby, to the extent of said inconsistencies or conflicts, are hereby specifically repealed.

**SECTION 3. Severability.**

In the event any provisions, sections, sentences, clause, or part of this Ordinance Amendment shall be held to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such invalidity, illegality, or unconstitutionality shall not affect or impair the remaining provisions, sections, sentences, clauses, or parts of this Ordinance Amendment, it being the intent of the Board of Supervisors that the remainder of the Ordinance Amendment shall remain in full force and effect.

**SECTION 4. Effective Date.**

This Ordinance Amendment shall take effect and be in force five (5) days after its enactment by the Board of Supervisors of Londonderry Township as provided by law.

[Intentionally Blank]

**DULY ORDAINED and ENACTED** this 20th day of April 20, 2021, by the Board of Supervisors of Londonderry Township, Dauphin County, Pennsylvania, in lawful session duly assembled.

**ATTEST:**



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**Steve Letavic, Secretary**

**BOARD OF SUPERVISORS  
LONDONDERRY TOWNSHIP**



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**Chairman, Township Board of Supervisors**