

**WILLISTOWN TOWNSHIP
CHESTER COUNTY, PENNSYLVANIA**

ORDINANCE NO. 11 of 2016

**AN ORDINANCE AMENDING CHAPTER 72, OF THE CODE OF
WILLISTOWN TOWNSHIP, BY ADDING ARTICLE VIII, EMERGENCY
SERVICES COMMUNICATIONS, ESTABLISHING MINIMUM
REGULATIONS APPLICABLE TO EMERGENCY COMMUNICATION
SYSTEMS.**

WHEREAS, the Board of Supervisors of Willistown Township finds that the ability of the police, fire, ambulance, and other emergency providers and personnel to communicate with each other within buildings and structures, and to communicate from within structures and buildings to personnel and locations outside buildings and structures, is of vital public importance; and

WHEREAS, a breakdown in communications among emergency providers and personnel creates a serious risk of harm to, and is a serious threat to, the safety and welfare of emergency personnel, the citizens of Willistown Township and the public in general.

WHEREAS, the Board of Supervisors of Willistown Township believes this Ordinance will protect the public health, safety and welfare; and

BE IT AND IT IS HEREBY ENACTED by the Board of Supervisors of Willistown Township, Chester County, Pennsylvania enacts amendments to Chapter 72, Construction Standards and Fire Prevention, by adding a new Article VIII, Emergency Services Communications, as follows:

Section 1. § 72-19 – Definitions

When used in this Ordinance, the following words, terms and phrases shall have the following meanings, unless expressly stated otherwise or unless the context clearly indicates otherwise:

APCO – Association of Public Safety Communications Officials International

CCDES – Chester County Department of Emergency Services

FCC – Federal Communications Commission

FIRE DEPARTMENT – The 4 fire companies that service Willistown Township; Goshen Fire Company, Malvern Fire Company, Newtown Square Fire Company, Paoli Fire Company.

NPSAC – National Public Safety Planning Advisory Committee

Section 2. § 72-20 – General Provisions

Except as otherwise provided; no person shall erect, construct, alter, refit, change the use of, or provide an addition of more than 30% of the existing floor area to any non-residential building or structure or any part thereof, or cause the same to be done, which fails to support adequate radio coverage for CCDES, the Fire & Ambulance Companies (Goshen Fire Company, Malvern Fire Company, Newtown Square Fire Company, Paoli Fire Company) that service Willistown Township, and the Willistown Township Police Department. For the purposes of this Section, adequate radio coverage shall include all of the following:

1. A minimum signal strength of -95dBm available in 95% for the area of each floor of the building
2. A minimum signal strength of -95dBm received at the closest CCDES radio communications site when transmitted from 95% of the area of each floor of the building.
3. The frequency range which must be supported shall be between 763 MHz and 861 MHz.
4. A 90% reliability factor.
5. Signal strength measurements, for the purpose of measuring the performance of a bi-directional amplifier, shall be based on one input signal adequate to obtain a maximum continuous operating output level.

The provisions of this Section shall become applicable upon notification to the property owner that unacceptable performance levels exist. The property owner shall have ninety (90) days from date of notification, to enhance radio coverage and bring it within the acceptable limits of these provisions.

Section 3. § 72-21 – Amplification Systems Allowed

Buildings and structures which cannot support the required level of radio coverage shall be equipped with either a radiating cable system or an internal multiple antenna system with or without FCC type accepted bi-directional 700/800 MHz amplifiers as needed. If any part of the installed system or systems contains an electrically powered component, the system shall be capable of operating on an independent battery and/or generator system for a period of at least twelve (12) hours without external power input. The battery system shall charge in the presence of an external power input.

Section 4. § 72-22 – Testing Procedures

1. Acceptance Test Procedure

When an in-building radio system is required, and upon completion of installation, it will be the building owner's responsibility to have the radio system tested to ensure that two-way coverage on each floor of the building is a minimum of 95%. Each floor of the building shall be divided into a grid of approximately twenty (20)

equal areas. A maximum of two (2) nonadjacent areas will be allowed to fail the test. In the event that three (3) of the areas fail the test, in order to be more statistically accurate, the floor may be divided in forty (40) equal areas. In such event, a maximum of four (4) nonadjacent areas will be allowed to fail the test. After the forty (40) area test, if the system continues to fail, the building owner shall have the system altered to meet the 95% coverage requirement.

The test shall be conducted using the most current portable radio or its equivalent, available to the Willistown Township Police and/or Fire Department, talking through the CCDES as specified by the authority having jurisdiction. 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 CCDES. Once the spot has been selected, prospecting for a better spot within the grid area will not be permitted.

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 measurements results become lost, the building owner will be required to rerun the acceptance test to reestablish the gain values.

2. Annual Tests

When an in building radio system is required, the building owner shall test all active components of the system, including but not limited to amplifiers, power supplies and backup batteries, a minimum of once every twelve (12) months. Amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance. Backup batteries and power supplies shall be tested under load for a period of one (1) hour to verify that they will properly operate during an actual power outage. If within the one (1) hour test period, in the opinion of the testing technician, the battery exhibits symptoms of failure, the test shall be extended for additional one (1) hour periods until the testing technician confirms the integrity of the battery. All other active components shall be checked to determine that they are operating within the manufacturer's specifications for the intended period.

3. Five Year Tests

In addition to the annual test, the building owner shall perform a radio coverage test a minimum of once every five (5) years to insure that the radio system continues to meet the requirements of the original acceptance test. The procedure set forth above shall apply to such tests. A copy of the accepted tests shall be provided to the Chester County Department of Emergency Services

4. Qualifications of Testing Personnel

All tests shall be conducted, documented and signed by a person in possession of a current FCC technician license, or a current technician certification issued by APCO, NABER, or PCIA. All test records shall be retained on the inspected premises by the building owner and a copy submitted to officials of the Willistown Township Police Department and the Willistown Township Administration Department.

Section 5. § 72-23 – Field Testing.

Police and Fire Department personnel, after providing reasonable notice to the owner or his representative, shall have the right to enter onto the property to conduct field testing to be certain that the required level of radio coverage is present.

Section 6. Severability.

If any term, condition, or provision of this Ordinance shall, to any extent, be held to be invalid or unenforceable, the remainder hereof shall be valid in all other respects and continue to be effective.

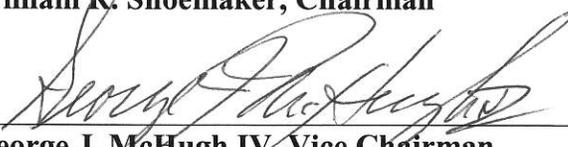
Section 7. Effective Date.

This Ordinance shall become effective five (5) days from the date of enactment.

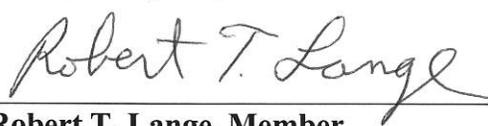
ENACTED and ORDAINED this 15th day of August, 2016.

**BOARD OF SUPERVISORS
WILLISTOWN TOWNSHIP**

William R. Shoemaker, Chairman



George J. McHugh IV, Vice Chairman



Robert T. Lange, Member

ATTEST:



David R. Burman, Secretary