

17-02
ORDINANCE

**TO ESTABLISH A NEW CHAPTER 164 OF THE
CODE OF THE TOWNSHIP OF POHATCONG ENTITLED,
“IN-BUILDING RADIO COMMUNICATIONS EQUIPMENT”**

WHEREAS, in emergency situations, including natural and manmade disasters, it is essential that effective radio communications be available, at all times, to emergency services personnel including police, fire, and emergency medical services; and

WHEREAS, there is a lack of adequate radio communication in certain large hardened buildings located and situate in the Township of Pohatcong that presents a danger to the owners and occupants of those buildings, to first responders, and to the general public utilizing these buildings; and

WHEREAS, the Mayor and Council of the Township of Pohatcong find that it is essential to the public health, safety and welfare to require the installation of in-building radio communications equipment for the purpose of maintaining minimum radio coverage and signal strength.

NOW, THEREFORE, be it ordained by the Mayor and Township Council of Pohatcong Township, Warren County, New Jersey that the Code of the Township of Pohatcong be revised with a new Chapter 164 entitled, “In-Building Radio Communications Equipment,” as follows:

SECTION I.

Chapter 164
In-Building Radio Communications Equipment

164-1. Purpose.

The purpose of this chapter is to ensure the availability of essential radio communications for all first responders including, but not limited to, police, fire, and emergency medical personnel.

164-2. Definitions.

Building – As used in this chapter, “Building” shall mean a combination of materials to form a construction adapted to permanent, temporary or continuous occupancy and having a roof, with the exception of the following:

1. Detached single family or two family dwelling unit buildings;
2. Conventional agricultural buildings and structures erected upon a working farm, including, but not limited to, farm animal buildings, farm machinery buildings and farm stands;
3. Commercial buildings 35’ high or less, provided that said building is not primarily of metal or concrete construction and does not contain below grade storage or parking areas.

Minimum Radio Coverage Into a Building

A minimum signal strength of -95dBm available in all areas of the building when transmitted from the radio system of a first responder. For purposes of this section, 90% building coverage is considered to be all areas of the building.

Minimum Signal Strength Out of a Building

A minimum signal strength of -95dBm received by the radio system of a first responder when transmitted from all areas of the building. For purposes of this section, 90% building coverage is considered to be all areas of the building.

164-3. Required Standards.

All current or proposed buildings shall be equipped to provide minimum radio coverage into and minimum signal strength out of said building as defined in Section 164-2.

164-4. Testing and Proof of Compliance.

All buildings shall be subject to at least one In-Building Coverage Test as follows:

1. For existing buildings within 180 days of the adoption of this chapter.
2. For newly constructed buildings, prior to the issuance of a certificate of occupancy.
3. Whenever structural changes occur (including additions to buildings) that would materially change the original field performance tests.
4. When any major repairs or alterations are made to an in-building amplification system.
5. Any time a first responder experiences a radio communications failure in responding to any event at a building.

164-5. Amplification Systems Allowed.

Buildings which cannot support the required level of radio coverage shall be equipped with a radiating cable system and/or a distributed antenna system (DAS) with FCC certified single boosters (aka bi-directional amplifiers) or systems otherwise approved by the Chief of Police of the Township of Pohatcong, or his designee, including, but not limited to, the Director of Warren County Public Safety in order to achieve the required adequate radio coverage. All amplification systems shall meet the following standards:

1. Battery Systems.

The active components of the installed system or systems shall be capable of operating on an independent battery system for a period of at least twelve (12) hours without external power input. The battery system shall automatically charge in the presence of an external power input.

2. Signal Booster Requirements.

If used, signal boosters shall meet the following requirements as well as any other requirements determined by the agency:

- A) All signal booster components shall be contained in one NEMA4 type, waterproof cabinet. Permanent external filters and attachments are not permitted.
- B) The battery system shall be contained in one NEMA4 type, waterproof cabinet.
- C) The system shall include automatic alarming of malfunctions of the signal booster and battery system. Any resulting alarm shall be transmitted to the agency's designated recipient by means of specified by the agency including, but not limited to, automatic standard telephone dial-up circuit, TCP/IP network circuit, RS232 interface, etc...
- D) FCC certification prior to installation. Pending FCC certification is not acceptable.
- E) All signal boosters must be compatible with both analog and digital communications simultaneously at the time of installation. The agency will provide the maximum acceptable propagation delay.
- F) Only equipment that is pre-approved by the Pohatcong Township Chief of Police or his designee, may be used.

3. Approval Prior to Installation.

No amplification system capable of operating on frequencies licensed by the FCC shall be installed without prior coordination and approval.

4. Acceptance Test Procedure.

When an in-building amplification radio system is required to meet the minimum radio coverage and signal strengths set forth in this chapter, it will be the responsibility of the owner or occupant of any such building to have the radio system tested to ensure that two-way coverage on each floor of the building is a minimum of 90% upon completion of installation. Each floor of the building shall be divided into a grid of approximately 20 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, the floor may be dividing into 40 equal areas in order to be more statistically accurate. A maximum of four non-adjacent areas will be allowed to fail the test. After the 40-area test, if the system continues to fail, it will be the building owner's responsibility to have the system altered to meet the 90% coverage requirement. The test shall be conducted using a calibrated portable radio of the latest brand and model used by the Pohatcong Township Police Department talking through the Department's radio communication system. A test location approximately in the center of each grid area will be selected for the test, then the radio will be enabled to verify two-way communications to and from the outside of the building through the agency's communication system. Once the test location 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 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. As part of the installation, a spectrum analyzer or other suitable test equipment shall be utilized to ensure spurious oscillations are not being generated by the subject signal booster due to coupling (lack of sufficient isolation) between the input and output antenna systems. This test will be conducted at the time of installation and subsequent annual inspections.

5. Annual Tests.

Following the installation of an in-building amplification radio system, all active components of the system, such as signal boosters, power supplies, and backup batteries, shall be tested at least once every 12 months by the building owner or occupant.

6. Field Testing.

Police and Fire Personnel shall at any time have the right to enter onto the property to conduct its own field testing to be certain that a required level of radio coverage is present.

SECTION II.

Repealer.

All ordinances or parts of Ordinances or resolutions that are inconsistent with the provisions of this Ordinance are repealed to the extent of such inconsistency.

SECTION III.

Effective Date.

This ordinance shall take effect twenty (20) days upon passage and publication as required by law.

ATTEST:

Wanda Kutzman, Clerk

James R. Kern, III, Mayor

PUBLIC NOTICE

PLEASE TAKE NOTICE that the foregoing Ordinance was introduced and passed on first reading on the 17th day of January, 2017, at a meeting of the Township Council of the Township of Pohatcong and will be taken up for final consideration and passage at a regularly scheduled meeting of the Mayor and Township Council of the Township of Pohatcong to be held on the 7th day of February, 2017, at the Municipal Building, 50 Municipal Drive, Phillipsburg, New Jersey.

Wanda L. Kutzman, Township Clerk

Introduced: January 17, 2017

Adopted:

