

Council Bill/General Ordinance No. 3033-2022

Sponsor:

AN ORDINANCE

AMENDING Chapter 8, "BUILDINGS AND OTHER CONSTRUCTION AND BUILDING SERVICES," Article VII, Division 3, "Emergency Radio System Coverage."

WHEREAS, the City of Moline is a home rule unit of local government pursuant to Article VII, Section 6 of the 1970 Illinois Constitution, and it has the authority to adopt ordinances and to promulgate rules and regulations that pertain to its government and affairs; and

WHEREAS, the City of Moline wishes to align the ordinance with the new national standards for P25 radios by amending the Emergency Radio System Coverage as herein set forth.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MOLINE, ILLINOIS, as follows:

Section 1 – That the facts and statements contained in the preambles to this ordinance are found to be true and correct and are hereby approved as part of this ordinance.

Section 2 – That Article VII, Division 3 of the City of Moline Code of Ordinances, "Emergency Radio System Coverage," be and the same is hereby amended to read as follows, with bold strikeouts indicating deletion in text (shown ~~stricken~~) and bold underscore (shown underscore) indicating addition to text:

Division 3. Emergency Radio System Coverage
SEC. 8-7300. EMERGENCY RADIO SYSTEM COVERAGE.

SEC. 8-7300. PURPOSE.

The stated purpose and intent of this ordinance is to benefit and protect the health, safety and welfare of the City's residents and the City's police and fire personnel by ensuring the uninterrupted operation of the City's public safety, law enforcement, and other emergency-related and operational or planned wireless communications networks. The City's wireless communications networks are essential to the health, safety, and welfare of the citizens of the City of Moline by providing communications for law enforcement activities, for emergency medical treatment, for fire suppression, for carrying on the business of government, and for providing communications in time of disasters. The construction or erection of tall, high-density structures in other areas of the United States have in the past resulted in the need for agencies to relocate their communications facilities or to provide additional facilities at a substantial cost to the public. This ordinance is intended to require that persons or entities constructing or erecting structures in the City of Moline do so in a manner that does not interfere with the City's communication networks or to alternatively provide the appropriate facilities necessary to eliminate that interference.

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SEC. 8-7301. REQUIREMENTS FOR COMPLIANCE.

(a) Except as otherwise provided in this division, no person shall erect, construct, change the use of, remodel or provide an addition in area greater than twenty percent (20%) of the footprint of the original building to, any building or structure or any part thereof, or cause the same to be done, which fails to support adequate radio coverage for the city's **centre** 911 communications system. Additionally, new or modified buildings or structures exceeding five (5) stories in height may not interrupt the microwave paths connecting the facilities that make up the 911 **centre** communications infrastructure. Prior to obtaining a building permit for such construction or modifications, the property owner must provide proof by a registered engineer's certification that the structure will not interfere with the present or planned microwave path. This certification must be provided to both the city's building official as well as to the city's chief of police and fire chief.

(b) For purposes of this section, adequate radio coverage shall mean that the radio coverage is sufficient to pass the testing procedures set forth in this division.

SEC. 8-7302. AMPLIFICATION SYSTEMS ALLOWED.

(a) Buildings and structures that do not support adequate radio coverage as identified herein shall be equipped with ~~either a radiating cable system or an internal multiple antenna system with or without FCC type accepted bi-directional 800 MHz amplifiers as needed~~ an approved FCC amplifier. The P25 Advisory Group and the contracted radio provider is the consultant who must approve the equipment.

(b) 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 automatically charge in the presence of an external AC power input.

~~—(c)—The 911 Centre System may require that bi-directional amplifiers include filters to reduce adjacent frequency interference at least 35dB below the NPSPAC band. Consultation with City staff is required to determine if the specific installation requires this additional filtering. If required by the system design, these filters shall be tuned to 825MHz and 869 MHz respectively. Other settings may be used provided that they do not attenuate the NPSPAC frequencies and further provided that they are not more than one MHz from the NPSPAC frequencies.~~

~~SEC. 8-7303. ALTERNATE METHODS.~~

~~Another acceptable method of providing coverage is to construct low power 'filler' trunked radio sites that are integrated into the 911 Centre System. This alternative~~

~~approach may be considered where the use of bi-directional amplifiers proves impractical.~~

SEC. 8-7304. CABLE RACEWAYS REQUIRED.

Any person who constructs or develops a commercial or industrial building or structure of any size shall install two (2) inch non-metallic raceways in the walls into which radiating cable or coaxial cable may be laid. Such raceways shall include an easily accessible opening to the structure's roof surface that allows for placement of an exterior antenna and access to each floor within the structure.

SEC. 8-7305. TESTING PROCEDURES.

(a) Whenever a building is required to comply with this division, the building owner must contact the City's ~~chief of police~~ **fire chief** who shall cause personnel ~~from the police department~~ to test the radio system to ensure that two-way coverage on each floor of the building, including underground floors, meets a minimum of ninety percent (90%) coverage. **Critical areas providing a means of egress or life safety equipment such as a fire pump room, Fire Command Center, or Fire Service Access Elevator Lobbies must have 99% floor area radio coverage per NFPA 72 (2013) §24.5.2.2.1. In all measured areas, inbound and outbound signal strength must be a minimum of -95dBm. Radio coverage is greatly impacted by building construction such as floor assemblies and wall assemblies and should be taken into consideration when a radio signal survey is conducted.**

(b) Two-Way Radio Communications Enhancement Systems generally need to accommodate several different radio frequencies in order to address the responding fire department's needs (fire and police dispatch channels, fireground/tactical channels, mutual aid channels, etc.) as well as any frequencies required by other emergency responders that require radio coverage. Ultimately, the fire code official is charged with maintaining the list of P25 frequencies currently required to be supported. However, if at any point in the future municipal frequencies are changed or added by the FCC or an AHJ, the system is expected to be modified or expanded to accommodate these changes at ownership's expense per NFPA 72 §24.5.2.4.2.

Whenever a building without a radio system fails to pass such test, then a radio system must be installed, and the building re-tested upon completion of installation. For purposes of testing, each floor of the building shall be divided into a grid of approximately twenty (20) equal areas. A maximum of two (2) nonadjacent areas may 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 into forty (40) equal areas. In such event, a maximum of four (4) nonadjacent areas may fail the test. If the system fails to pass the forty (40) area test, the building owner shall have the system altered to meet the ninety percent (90%) coverage requirement.

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(b) The test required by this section shall be conducted using a portable radio of the type the City ~~and the 911 Centre System~~ then currently utilize. 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 911 Centre System. Once the center spot has been selected, prospecting for a better spot within the grid area will not be permitted.

(c) The gain values of all amplifiers shall be measured and the test measurement results shall be provided to the building owner, and shall be kept on file with the building owner in the building. The measurements can be compared and verified each year during the owner's annual tests, as provided herein. In the event that the measurement results became lost, the building owner shall notify the ~~chief of police city~~, who will cause ~~police department~~ personnel to rerun the acceptance test to re-establish the gain values.

(d) When a radio system is required, the building owner shall cause a technician in possession of a current FCC license, or a technician certified by the Associated Public-Safety Communications Officials International (APCO) or the Personal Communications Industry Association (PCIA), to 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 remains the same as that found upon initial 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 purpose. The technician shall prepare a written report documenting the test findings, and the building owner shall provide the chief of police with a copy within ten (10) days of the completing of testing.

(e) In addition to the annual test, the building owner shall contact the ~~chief of police to arrange for police department personnel city~~ to perform a radio coverage test a minimum of once every five (5) years to ensure that the radio system continues to meet the requirements of the original acceptance test. The procedures set forth above shall apply to such tests.

(f) Police and fire personnel, at any time after providing reasonable notice to the building owner or his or her 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. Upon completion of each inspection in which the building does not meet the testing requirements set forth herein, the building owner shall pay the City an inspection fee of fifty dollars (\$50.00).

SEC. 8-7306. EXEMPTIONS.

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(a) This ordinance shall not apply to the following buildings provided they do not make use of any metal construction or any underground storage or parking areas:

- (1) Buildings less than five thousand (5,000) gross area square feet;
- (2) Any building constructed of wood frame;
- (3) Any building thirty-five (35) feet high or less.

(b) For purposes of this section, parking structures and stairwells are included in the definition of "building" and stair shafts and elevators are included in the definition of "all parts of a building."

SEC. 8-7307. PENALTIES.

Any person violating any of the provisions of this ordinance shall be subject to a fine in accordance with the general penalty provisions of the Moline Code of Ordinances as set forth in Section 1-1107 of said code. In addition, any building or structure which does not meet the requirements set forth in this ordinance is hereby declared to be a public nuisance, and the City may, in addition to seeking any other appropriate legal remedy, pursue equitable remedies to abate said nuisance in accordance with the provisions of Chapter 21 of the Moline Code of Ordinances.

SEC. 8-7308. SEVERABILITY.

If any section, subsection, sentence, clause, phase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions hereof.

SEC. 8-7309. CONFLICT.

This ordinance supersedes all articles or parts of articles adopted prior hereto which are in conflict herewith, to the extent of such conflict.

Section 3 – That this ordinance shall be in full force and effect from and after passage, approval, and if required by law, publication in the manner provided for by law.

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DocuSigned by:
S. Kayyato

Mayor 8D16AB8EFE254D4...

October 18, 2022

Date

Passed: October 18, 2022_____

Approved: October 25, 2022_____

Attest: *Janice L. N. Pava*

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City Clerk