**Minimum Two-Way Radio Specifications
for Communicating on the Monroe County Control Center
Public Safety Grade - Mission Critical
P25 Digital, Simulcast and Trunked Two-Way Radio Network**

Notice

This list represents the minimum specifications that are required to work on the new P25 public safety radio network. The latest technology in two-way radio equipment is very "feature rich" but some features simply will either not work on the new system because of proprietary constraints by the radio manufacturer or they are just not necessary for the end user. This can ultimately result in a higher purchase price being paid by your agency.

The Monroe County Control Center is spending a significant amount of money to design and install a P25 radio system which will provide better radio coverage for you, the field users, and add system capacity moving into the future. MCCC will not be liable or responsible to make adjustments for any radio performance issues when a field user purchases radio equipment that is below or outside the realm of the minimum specification criteria as set forth in this document.

Operating Frequency Range:

Police, Fire, and Public Works: 450-512 MHz (UHF Band)

*EMS Only; Dual Band * 150-174 MHz (VHF High Band) and 450-512MHz (UHF Band)
 *Emergency Medical Services will need to procure "Dual Band" VHF & UHF mobiles or mobiles and portables. This is required to be compatible with our current VHF EMS radio network, and the new UHF P25 Network which EMS is included in. While equipment purchased later, after the transition, will no longer need to include VHF, it is strongly suggested you still purchase VHF capable dual band radios in order to remain compatible with the other County radio networks within and outside of the Eastern PA EMS Region.

Mobile and Portable Radio Hardware and Software Requirements:

UHF Transmitter Output Power (Watts)
- Mobiles: 45 watts Maximum ERP
- Portables: 5 watts Maximum ERP

Police, Fire, EMS and Public Works Radios
- Analog Conventional
- P25 CAI Conventional
- P25 Phase 1 (pre-requisite for ordering Phase 2)
- P25 Phase 2 (also known as TDMA Operation)
- P25 Trunking (if listed separately by the manufacturer)
- MDC1200 PTT ID Signaling (Needed for radio identification in the current analog radio system. P25 radio identification is inherent in the required P25 software.)

Police Only-Additional Portable and Mobile Radio Software Requirement
AES Single Key Encryption (*Multi-Key not required*) for future tactical communications.

Optional Radio Software/Hardware for End Users Consideration:
- "HazLoc" Certification/Intrinsically Safe

Federal Grant Applications-AES Encryption
To our knowledge, in certain Federal grants, such as the "Assistance to Firefighters Grant", AES Encryption is a requirement and *must be included in your radio specification for your grant application, or else it will be rejected.* Have your grant writer research these and any other specific radio requirements when preparing your grant application.

FCC Type Acceptance
Be sure that you purchase two-way radio equipment that is *FCC Type Accepted* making it legal for use in the United States. Some radio equipment and software on the open market may not be FCC Type Accepted and will therefore not be allowed on the network. *Buyer beware*...P25 radio equipment is expensive, know what you are buying and who you are buying it from.

Questions, Comments or Concerns about these requirements:

Email: "P25radio@monroeco911.com"

or call

Call: 570-992-4500.