§ 101.513  Transmitter power.

The transmitter power will be governed by §101.113. Further, each application must contain an analysis demonstrating compliance with §101.113(a).

§ 101.515  Emissions and bandwidth.

Different types of emissions may be authorized if the applicant describes fully the modulation and bandwidth desired, and demonstrates that the bandwidth desired is no wider than needed to provide the intended service. In no event, however, may the necessary or occupied bandwidth exceed the specified channel width of the assigned pair.

§ 101.517  Antennas.

(a) Transmitting antennas may be omnidirectional or directional, consistent with coverage and interference requirements.

(b) The use of horizontal or vertical plane wave polarization, or right hand or left hand rotating elliptical polarization must be used to minimize harmful interference between stations.

(c) Directive antennas must be used at all DEMS User Stations and may be elevated no higher than necessary to assure adequate service. Antenna structures requiring FAA notification under part 17 of this chapter must be registered with the Commission. The structure owner is responsible for registering, painting, and lighting the structure if applicable. Requests for such authorization must show the inclusive dates of the proposed operation.

§ 101.519  Interconnection.

(a) All DEMS licensees must make available to the public all information necessary to allow the manufacture of user equipment that will be compatible with the licensee’s network.

(b) All DEMS licensees must make available to the public all information necessary to allow interconnection of DEMS networks.

§ 101.521  Spectrum utilization.

All applicants for DEMS frequencies in the 10.6 GHz band must submit as part of the original application a detailed plan indicating how the bandwidth requested will be utilized. In particular the application must contain detailed descriptions of the modulation method, the channel time sharing method, any error detecting and/or correcting codes, any spatial frequency reuse system and the total data throughput capacity in each of the links in the system. Further, the application must include a separate analysis of the spectral efficiency including both information bits per unit bandwidth and the total bits per unit bandwidth.

§ 101.523  Service areas.

(a) The service areas for 24 GHz are Economic Areas (EAs) as defined in this paragraph (a). The Bureau of Economic Analysis, U.S. Department of Commerce, organized the 50 States and the District of Columbia into 172 EAs. See 60 FR 13114 (March 10, 1995). Additionally, there are four FCC-created EA-like areas:

(1) Guam and Northern Mariana Islands;

(2) Puerto Rico and the U.S. Virgin Islands;

(3) American Samoa, and

(4) the Gulf of Mexico. The Gulf of Mexico EA extends from 12 nautical miles off the U.S. Gulf coast outward into the Gulf. See 62 FR 9636 (March 3, 1997), in which the Commission created an additional four economic area-like areas for a total of 176 EA service areas. Maps of the EAs and the Federal Register Notice that established the 172 Economic Areas (EAs) are available for public inspection and copying at the FCC Reference Center, Room CY A–257, 445 12th St., SW., Washington, DC 20554. These maps and data are also available on the FCC Web site at www.fcc.gov/oet/info/maps/areas/.

(b) Where an incumbent SMSA license area in the 24 GHz band occupies only a portion of an EA available for