§ 74.1236 Emission and bandwidth.

(a) The license of a station authorized under this subpart allows the transmission of either F3 or other types of frequency modulation (see § 2.201 of this chapter) upon a showing of need, as long as the emission complies with the following:

(1) For transmitter output powers no greater than 10 watts, paragraphs (b), (c), and (d) of this section apply.

(2) For transmitter output powers greater than 10 watts, § 73.317 (a), (b), (c), and (d) apply.

(b) Standard width FM channels will be assigned and the transmitting apparatus shall be operated so as to limit spurious emissions to the lowest practicable value. Any emissions including intermodulation products and radio-frequency harmonics which are not essential for the transmission of the desired aural information shall be considered to be spurious emissions.

(c) The power of emissions appearing outside the assigned channel shall be attenuated below the total power of the emission as follows:

<table>
<thead>
<tr>
<th>Distance of emission from center frequency</th>
<th>Minimum attenuation below unmodulated carrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 to 240 kHz</td>
<td>25 dB</td>
</tr>
<tr>
<td>Over 240 and up to 600 kHz</td>
<td>35 dB</td>
</tr>
<tr>
<td>Over 600 kHz</td>
<td>60 dB</td>
</tr>
</tbody>
</table>

(d) Greater attenuation than that specified in paragraph (c) of this section may be required if interference results outside the assigned channel.

§ 74.1237 Antenna location.

(a) An applicant for a new station to be authorized under this subpart or for a change in the facilities of such a station shall endeavor to select a site which will provide a line-of-sight transmission path to the entire area intended to be served and at which there is available a suitable signal from the primary station. The transmitting antenna should be placed above growing vegetation and trees lying in the direction of the area intended to be served, to minimize the possibility of signal absorption by foliage.

(b) Consideration should be given to accessibility of the site at all seasons of the year and to the availability of facilities for the maintenance and operation of the FM translator.

(c) Consideration should be given to the existence of strong radiofrequency fields from other transmitters at the translator site and the possibility that such fields may result in the retransmission of signals originating on frequencies other than that of the primary station.

(d) The transmitting antenna of an FM booster station shall be located within the protected contour of its primary station, subject to Note, § 74.1231 (h). The transmitting antenna of a commonly owned commercial FM translator station shall be located within the protected contour of its commercial primary FM station.

(e) Where an FM translator or booster licensee or permittee proposes to mount its antenna on or near an AM tower, as defined in § 1.30002, the FM translator or booster licensee or permittee must comply with § 1.30003 or § 1.30002.

§ 74.1250 Transmitters and associated equipment.

(a) FM translator and booster transmitting apparatus, and exciters employed to provide a locally generated and modulated input signal to translator and booster equipment, used by stations authorized under the provisions of this subpart must be certified upon the request of any manufacturer of transmitters in accordance with this section and subpart J of part 2 of this chapter. In addition, FM translator and booster stations may use FM broadcast transmitting apparatus verified or approved under the provisions of part 73 of this chapter.

(b) Transmitting antennas, antennas used to receive signals to be rebroadcast, and transmission lines are not subject to the requirement for certification.