

Federal Communications Commission

§ 18.111

radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with this chapter.

(c) *Industrial, scientific, and medical (ISM) equipment.* Equipment or appliances designed to generate and use locally RF energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of telecommunication. Typical ISM applications are the production of physical, biological, or chemical effects such as heating, ionization of gases, mechanical vibrations, hair removal and acceleration of charged particles.

(d) *Industrial heating equipment.* A category of ISM equipment used for or in connection with industrial heating operations utilized in a manufacturing or production process.

(e) *Medical diathermy equipment.* A category of ISM equipment used for therapeutic purposes, not including surgical diathermy apparatus designed for intermittent operation with low power.

(f) *Ultrasonic equipment.* A category of ISM equipment in which the RF energy is used to excite or drive an electromechanical transducer for the production of sonic or ultrasonic mechanical energy for industrial, scientific, medical or other noncommunication purposes.

(g) *Consumer ISM equipment.* A category of ISM equipment used or intended to be used by the general public in a residential environment, notwithstanding use in other areas. Examples are domestic microwave ovens, jewelry cleaners for home use, ultrasonic humidifiers.

(h) *ISM frequency.* A frequency assigned by this part for the use of ISM equipment. A specified tolerance is associated with each ISM frequency. See § 18.301.

(i) *Marketing.* As used in this part, marketing shall include sale or lease, offer for sale or lease, advertising for sale or lease, the import or shipment or other distribution for the purpose of sale or lease or offer for sale or lease. See subpart I of part 2 of this chapter.

(j) *Magnetic resonance equipment.* A category of ISM equipment in which RF energy is used to create images and

data representing spatially resolved density of transient atomic resources within an object.

NOTE: In the foregoing, sale (or lease) shall mean sale (or lease) to the user or a vendor who in turn sells (or leases) to the user. Sale shall not be construed to apply to devices sold to a second party for manufacture or fabrication into a device which is subsequently sold (or leased) to the user.

[50 FR 36067, Sept. 5, 1985, as amended at 59 FR 39472, Aug. 3, 1994]

§ 18.109 General technical requirements.

ISM equipment shall be designed and constructed in accordance with good engineering practice with sufficient shielding and filtering to provide adequate suppression of emissions on frequencies outside the frequency bands specified in § 18.301.

§ 18.111 General operating conditions.

(a) Persons operating ISM equipment shall not be deemed to have any vested or recognizable right to the continued use of any given frequency, by virtue of any prior equipment authorization and/or compliance with the applicable rules.

(b) Subject to the exceptions in paragraphs (c) and (d) of this section and irrespective of whether the equipment otherwise complies with the rules in this part, the operator of ISM equipment that causes harmful interference to any authorized radio service shall promptly take whatever steps may be necessary to eliminate the interference.

(c) The provisions of paragraph (b) of this section shall not apply in the case of interference to an authorized radio station or a radiocommunication device operating in an ISM frequency band.

(d) The provisions of paragraph (b) of this section shall not apply in the case of interference to a receiver arising from direct intermediate frequency pickup by the receiver of the fundamental frequency emissions of ISM equipment operating in an ISM frequency band and otherwise complying with the requirements of this part.

§ 18.113

§ 18.113 Inspection by Commission representatives.

Upon request by a representative of the Commission the manufacturer, owner, or operator of any ISM equipment shall make the equipment available for inspection and promptly furnish the Commission with such information as may be required to indicate that the equipment complies with this part.

§ 18.115 Elimination and investigation of harmful interference.

(a) The operator of ISM equipment that causes harmful interference to radio services shall promptly take appropriate measures to correct the problem.

(b) If the operator of ISM equipment is notified by the Commission's Regional Director that operation of such equipment is endangering the functioning of a radionavigation or safety service, the operator shall immediately cease operating the equipment. Operation may be resumed on a temporary basis only for the purpose of eliminating the harmful interference. Operation may be resumed on a regular basis only after the harmful interference has been eliminated and approval from the Regional Director obtained.

(c) When notified by the Regional Director that a particular installation is causing harmful interference, the operator or manufacturer shall arrange for an engineer skilled in techniques of interference measurement and control to make an investigation to ensure that the harmful interference has been eliminated. The Regional Director may require the engineer making the investigation to furnish proof of his or her qualifications.

[50 FR 36067, Sept. 5, 1985, as amended at 80 FR 53750, Sept. 8, 2015]

§ 18.117 Report of interference investigation.

(a) An interim report on investigations and corrective measures taken pursuant to § 18.115 of this part shall be filed with the Regional Director of the local FCC office within 30 days of notification of harmful interference. The final report shall be filed with the Re-

47 CFR Ch. I (10–1–15 Edition)

gional Director within 60 days of notification.

(b) The date for filing the final report may be extended by the Regional Director when additional time is required to put into effect the corrective measures or to complete the investigation. The request for extension of time shall be accompanied by a progress report showing what has been accomplished to date.

[80 FR 53750, Sept. 8, 2015]

§ 18.121 Exemptions.

Non-consumer ultrasonic equipment, and non-consumer magnetic resonance equipment, that is used for medical diagnostic and monitoring applications is subject only to the provisions of §§ 18.105, 18.109 through 18.119, 18.301 and 18.303 of this part.

[59 FR 39472, Aug. 3, 1994; 60 FR 47302, Sept. 12, 1995]

Subpart B—Applications and Authorizations

§ 18.201 Scope.

This subpart contains the procedures and requirements for authorization to market or operate ISM equipment under this part.

§ 18.203 Equipment authorization.

(a) Consumer ISM equipment, unless otherwise specified, must be authorized under either the Declaration of Conformity or certification procedure prior to use or marketing. An application for certification shall be filed with the Commission on an FCC Form 731, pursuant to the relevant sections in part 2, subpart J of this chapter and shall also be accompanied by:

(1) A description of measurement facilities pursuant to § 2.948, or reference to such information already on file with the Commission.

(2) A technical report pursuant to §§ 18.207 and 18.311.

(b) Consumer ultrasonic equipment generating less than 500 watts and operating below 90 kHz, and non-consumer ISM equipment shall be subject to verification, in accordance with the relevant sections of part 2, subpart J of this chapter.