

**§ 101–35.401 General.**

Consolidated local telecommunications service is available in most buildings occupied by concentrations of Federal employees. Local telecommunications includes any access services which provide, for a monthly fee, electronic connectivity to a larger telecommunications network and those support services which provide for the acquisition, operation and management of attached systems. Information on the use of consolidated local telecommunications services may be obtained from: GSA, Federal Telecommunications Service, Office of Regional Services (TR), 1730 M Street, NW., Suite 200, Washington, DC 20036.

**§ 101–35.402 Policies.**

(a) All executive agencies shall evaluate sharing Government owned or contracted local telecommunications facilities and services. Evaluation criteria and associated decisions must be documented as appropriate.

(b) Executive agencies receiving local telecommunications services from another agency, e.g., a GSA consolidated switch, must acknowledge their shared responsibility to that community of agencies in exchange for those services. Such a community shall be considered a telecommunications "Shared Resource Community." The agency primarily responsible for providing telecommunications service(s) to members of this community shall be the "Lead Agency." Lead agencies must acknowledge their responsibility(s) to provide services until an alternative arrangement has been coordinated with the community. Different agencies may take the lead in providing different services. Memoranda of Agreement will identify responsibilities and cost-recovery mechanisms.

(c) GSA charges to agencies for consolidated local telecommunications service will cover expenses for installation, changes in service, a common distributable charge, and termination.

**Subpart 101–35.5—National Security and Emergency Preparedness (NSEP)****§ 101–35.500 Scope of subpart.**

This subpart discusses NSEP services and assistance provided by GSA to executive agencies.

**§ 101–35.501 General.**

Executive Order 12472 (49 FR 13471, 3 CFR, 1984 Comp., p. 193), requires that GSA ensure that the NSEP requirements of agencies are met. GSA incorporates NSEP safeguards and support features in networks and

services it provides for agencies. GSA also provides emergency telecommunications for the special needs of agencies and helps agencies plan, obtain, and maintain continuity of telecommunications during wartime and non-wartime emergencies.

**§ 101–35.502 Policy.**

Agencies shall use available GSA telecommunications systems and services to meet their NSEP requirements.

**§ 101–35.503 Procedures.**

Before acquiring services or facilities to meet special NSEP requirements, agencies shall review GSA-provided services. Agencies shall coordinate their special NSEP requirements with: General Services Administration, Federal Telecommunications Service, Office of Service Delivery, NSEP Center (TOS), 18th & F Streets, NW, Washington, DC 20405.

**Subpart 101–35.6—Delegation of GSA's Multiyear Contracting Authority for Telecommunications Resources****§ 101–35.600 Scope of subpart.**

This subpart discusses the delegation of GSA's multiyear contracting authority to executive agencies.

**§ 101–35.601 General.**

Executive agencies are authorized to enter into multiyear contracts for telecommunications resources subject to the following conditions:

(a) The agency shall notify GSA/T prior to using GSA's multiyear contracting authority.

(b) The contract life including options, shall not exceed 10 years.

(c) Agencies shall comply with OMB budget and accounting procedures relating to appropriated funds.

Dated: July 31, 1996.

David J. Barram,

*Acting Administrator of General Services.*

[FR Doc. 96–19961 Filed 8–6–96; 8:45 am]

BILLING CODE 6820–25–P

**FEDERAL COMMUNICATIONS COMMISSION****47 CFR Parts 1, 2, 15, 24 and 97**

[ET Docket No. 93–62; FCC 96–326]

**Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation**

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** The *Report and Order* ("R&O") amends the Commission's Rules to adopt new guidelines and methods for evaluating the environmental effects of radiofrequency (RF) radiation from FCC-regulated transmitters, in accordance with The National Environmental Policy Act (NEPA) of 1969. NEPA requires agencies of the Federal Government to evaluate the effects of their actions on the quality of the human environment. To meet the Commission's responsibilities under NEPA, the Commission has adopted revised RF exposure guidelines for purposes of evaluating potential environmental effects of RF radiation. The new guidelines reflect more recent scientific studies of the biological effects of RF radiation. Use of the new guidelines will ensure that the public and workers receive adequate protection from exposure to potentially harmful RF field.

**EFFECTIVE DATE:** August 6, 1996.

**FOR FURTHER INFORMATION CONTACT:** FCC RF Safety Program, (202) 418–2422, Office of Engineering and Technology.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's *Report and Order* in ET Docket No. 93–62, FCC 96–326, adopted August 1, 1996 and released August 1, 1996. The complete text of this *Report and Order* is available for inspection and copying during normal business hours in the FCC Reference Center (Room 239), 1919 M Street, N.W., Washington, D.C., and also may be purchased from the Commission's copy contractor, International Transcription Services, Inc., (202) 857–3800, 2100 M Street, NW, Suite 140, Washington, DC 20037.

**Summary of the Report and Order**

1. By this action, we are amending the Commission's Rules to adopt new guidelines and methods for evaluating the environmental effects of radiofrequency (RF) radiation from FCC-regulated transmitters. We are adopting Maximum Permissible Exposure (MPE) limits for electric and magnetic field strength and power density for transmitters operating at frequencies from 300 kHz to 100 GHz. Specifically, we are adopting limits for field strength and power density that are generally based on Sections 17.4.1 and 17.4.2 and the time-averaging provisions recommended in Sections 17.4.1.1 and 17.4.3 of "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86 (1986), National Council on Radiation Protection and Measurements (NCRP). With the exception of the limits on exposure to power density above

1500 MHz and the limits for exposure to lower frequency magnetic fields, these MPE limits are also generally based on the guidelines contained in the RF safety standard developed by the Institute of Electrical and Electronic Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI). See Section 4.1 of ANSI/IEEE C95.1-1992, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz". We are also adopting limits for localized ("partial body") absorption that will apply to certain portable transmitting devices. These guidelines are based on those recommended by ANSI/IEEE and NCRP. See Sections 4.2.1 and 4.2.2 of ANSI/IEEE C95.1-1992 and Section 17.4.5 of NCRP Report No. 86. We believe that the guidelines we are adopting will protect the public and workers from exposure to potentially harmful RF fields.

2. In reaching our decision on the adoption of new RF exposure guidelines we have carefully considered the large number of comments submitted in this proceeding, and particularly those submitted by the U. S. Environmental Protection Agency (EPA), the Food and Drug Administration (FDA) and other federal health and safety agencies. The new guidelines we are adopting are based primarily on the recommendations of those agencies, and we believe that these guidelines represent a consensus view of the federal agencies responsible for matters relating to the public safety and health.

3. The MPE limits adopted herein are based on exposure criteria quantified in terms of specific absorption rate (SAR), a measure of the rate of RF energy absorption. The basis for these limits, as well as the basis for the 1982 ANSI limits that the Commission previously specified in our rules, is an SAR limit of 4 watts per kilogram. The new MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits specified by ANSI in 1982. The more conservative limits do not arise from a fundamental change in the RF safety criteria for SAR, but from a precautionary desire for more rigor in the derivation of factors which allow limits for MPE to be derived from SAR limits.

4. This action satisfies the requirements of the Telecommunications Act of 1996 for a timely resolution of this proceeding. We note that research and analysis relating to RF safety and health is ongoing, and changes in recommended exposure limits are possible in the future. In that

regard, we intend to continue our cooperative work with industry and with the various agencies and organizations with responsibilities in this area in order to ensure that our guidelines continue to be appropriate and scientifically valid.

5. Accordingly, it is ordered that Parts 1, 2, 15, 24 and 97 of the Commission's Rules and Regulations are amended as specified below, effective August 6, 1996. Section 704(b) of the Telecommunications Act of 1996 requires that the Commission complete action in this proceeding, and prescribe and make effective rules regarding the environmental effects of RF emissions, by no later than August 6, 1996 (180 days after enactment)]. We find that good cause exists, pursuant to 5 U.S.C. Sec. 553 (d)(3), to make these rules effective upon their release rather than follow the normal practice of making them effective 30 days after publication in the Federal Register. Congress directed the Commission to make these rules effective within 180 days. Sec. 704 of the Telecommunications Act of 1996, Public Law 104-104, 110 Stat. 56 (1996) states that "[w]ithin 180 days after the enactment of this Act, the Commission shall complete action in ET Docket 93-62 to prescribe and make effective rules regarding the environmental effects of radio frequency emissions." Unlike other sections of that Act, see, e.g., Secs. 251(d)(4)(1), which directs us to "complete" action, and Sec. 254(a)(2), which directs us to "promulgate" rules, Sec. 704 requires that the RF exposure guidelines be made effective within the prescribed 180 day time period. Completion of this rule making has required an extensive amount of work to resolve some extremely complex issues. In addition, coordination with the various federal agencies pursuant to the Interdepartmental Radio Advisory Committee has consumed more time than anticipated. The time required to review the comments, decide on the best possible guidelines based on the scientific evidence and, comments and to coordinate that decision with the other agencies has made it impossible to delay the effective date for 30 days and still meet the Congressionally imposed deadline. Thus, we have no alternative but to make these rules effective immediately. The authority for issuance of this Report and Order is contained in Sections 4(i), 7(a), 303(c), 303(f), 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 157(a), 303(c), 303(f), 303(g), 303(r), and 332(c)(7), unless otherwise noted.

## Final Regulatory Flexibility Analysis

As required by Section 603 of the Regulatory Flexibility Act, 5 U.S.C. § 603 (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice*.<sup>1</sup> The Commission sought written public comments on the proposals in the *Notice*, including on the IRFA. The Commission's Final Regulatory Flexibility Analysis (FRFA) in this Report and Order conforms to the RFA, as amended by the Contract With America Advancement Act of 1996 (CWAAA), Pub. L. No. 104-121, 110 Stat. 847 (1996).<sup>2</sup>

### *I. Need for and Purpose of this Action:*

The National Environmental Policy Act (NEPA) of 1969 requires agencies of the Federal Government to evaluate the effects of their actions on the quality of the human environment. To meet its responsibilities under NEPA, the Commission has adopted revised RF exposure guidelines for purposes of evaluating potential environmental effects of RF radiation from FCC-regulated facilities. The new guidelines reflect more recent scientific studies of the biological effects of RF radiation. Use of these new guidelines will ensure that the public and workers receive adequate protection from exposure to potentially harmful RF field.

### *II. Summary of Issues Raised by the Public Comments in Response to the Initial Regulatory Flexibility Analysis*

No comments were filed in direct response to the IRFA. In general comments on the *Notice*, however, some commenters raised issues that might affect small entities. In particular, some commenters argued that the cost of complying with the radio frequency (RF) limits could be overly burdensome, and this could negatively impact small businesses. They express concern that the cost of testing, with respect to devices operating in close proximity to the body, is extremely expensive and obtaining testing equipment could be difficult for small businesses. For example, the National Association of Business and Educational Radio, Inc. (NABER) encourages us to categorically exclude land mobile transmitters, expressing concern that if categorical exclusions for land mobile services are eliminated, manufacturers would have to institute unnecessary and costly

<sup>1</sup> See *Notice of Proposed Rule Making*, ET Docket No. 93-62, 8 FCC Rcd 2849 (1993), 58 FR 19393 (April 14, 1993).

<sup>2</sup> Subtitle II of the CWAAA is "The Small Business Regulatory Enforcement Fairness Act of 1996" (SBREFA), codified at 5 U.S.C. § 601 et seq.

testing.<sup>3</sup> They also request that we limit the amount of paperwork that is necessary for demonstrating compliance with the limits. In particular, the Broadcast Joint Commenters suggest that additional paperwork should not be required to establish compliance with the new policies because it would be needlessly burdensome to the broadcasters and to the Mass Media Bureau.<sup>4</sup> As discussed in Section V of this FRFA, we have attempted to address these concerns.

### *III. Description and estimate of the Small Entities Subject to the Rules:*

The rules in this Report and Order will apply to the following twelve industry categories and services. The RFA generally defines the term "small business" as having the same meaning as the term "small business concern" under the Small Business Act, 15 U.S.C. § 632. Based on that statutory provision, we will consider a small business concern one which (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA). The RFA SBREFA provisions also apply to nonprofit organizations and to governmental organizations. Since the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Commission was unable to request information regarding the number of small business within each of these services or the number of small business that would be affected by this action. We have, however, made estimates based on our knowledge about applications that have been submitted in the past. To the extent that a government entity may be a licensee or an applicant, the impact on those entities is included in the estimates for small businesses below.

As discussed below, under the rules we are adopting many radio services are categorically excluded from having to determine compliance with the new RF radiation limits that are being adopted. This exclusion is based on a determination that there is little potential for these services causing exposures in excess of the limits. Within the services below, many transmitting facilities are also categorically excluded based on antenna location and power. These categorical exclusions significantly reduce the burden associated with these rules, and may

reduce the impact of these rules on small businesses.

#### *A. Radiofrequency Devices*

The radiofrequency devices affected by this rulemaking are low power, unlicensed transmitters that will be used to provide, on millimeter wave frequencies, a variety of services, including vehicle collision avoidance and high data rate/short range wireless data communications. Unlicensed personal communications service (PCS) transmitters are also radiofrequency devices. Radiofrequency devices are subject to compliance with the new RF radiation requirements at the time of equipment authorization. Therefore, it will be the equipment manufacturers and importers who will be affected by this action.

We expect most of the firms that would be interested in producing millimeter wave and unlicensed PCS devices will be large businesses. We note that Ford Motor and Hewlett Packard have expressed interest in millimeter wave devices and filed comments in this proceeding. In addition, Motorola and Ericsson Corporate, both large equipment manufacturers, have expressed interest in manufacturing unlicensed PCS devices. Nevertheless, it is conceivable that small businesses will also want to manufacture these devices.

The Commission has not developed a definition of small entities applicable to radiofrequency devices. Therefore, the applicable definition of small entity is the definition under the SBA applicable to the "Communications Services, Not Elsewhere" category. A small millimeter wave device or unlicensed PCS entity under this definition is one with less than \$11.0 million in annual receipts.<sup>5</sup>

The Commission has not yet authorized any millimeter wave devices, and has authorized fewer than ten unlicensed PCS devices. Both these services are new, so we really don't know how many applications for equipment authorization we may receive, nor how many small manufacturers may be interested in producing these products. Since the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Commission was unable to request information regarding the number of small businesses in this category. The Census Bureau estimates indicate that of the 848 firms in the "Communications Services, Not Elsewhere" category, 775 are small businesses. Based on this

information, as well as our past experience in granting equipment authorization for other types of radiofrequency devices, we estimate that 50 percent of the applications for millimeter wave and unlicensed PCS devices will be from small businesses.

The Commission anticipates that approximately 30 applications will be filed annually for devices that operate in the millimeter band and unlicensed PCS spectrum. All of these applications will require an initial determination of compliance with our new RF guidelines. Of these devices, ten will require specific absorption rate (SAR) modeling or measurement, which adds cost to the authorization process.

#### *B. Cellular Radio Telephone Service*

The Commission has not developed a definition of small entities applicable to cellular licensees. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules applicable to radiotelephone companies. This definition provides that a small entity is a radiotelephone company employing fewer than 1,500 persons.<sup>6</sup> Since the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Commission was unable to request information regarding the number of small cellular businesses and is unable at this time to make a precise estimate of the number of cellular firms which are small businesses.

The size data provided by the SBA does not enable us to make a meaningful estimate of the number of cellular providers which are small entities because it combines all radiotelephone companies with 500 or more employees.<sup>7</sup> We therefore used the 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, which is the most recent information available. That census shows that only 12 radiotelephone firms out of a total of 1,178 such firms which operated during 1992 had 1,000 or more employees.<sup>8</sup> Therefore, even if all 12 of these large firms were cellular telephone

<sup>6</sup> 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812.

<sup>7</sup> U.S. Small Business Administration 1992 Economic Census Employment Report, Bureau of the Census, U.S. Department of Commerce, SIC Code 4812 (radiotelephone communications industry data adopted by the SBA Office of Advocacy).

<sup>8</sup> U.S. Bureau of the Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications, and Utilities, UC92-S-1, Subject Series, Establishment and Firm Size, Table 5, Employment Size of Firms: 1992, SIC Code 4812 (issued May 1995).

<sup>3</sup> NABER Comments at 5-6.

<sup>4</sup> Broadcast Joint Commenters Reply Comments at 39-40.

<sup>5</sup> 13 CFR § 121.201, Standard Industrial Classification (SIC) Code 4899.

companies, all of the remainder were small businesses under the SBA's definition. We assume that, for purposes of our evaluations and conclusions in the Final Regulatory Flexibility Analysis, all of the current cellular licensees are small entities, as that term is defined by the SBA. Although there are 1,758 cellular licenses, we do not know the number of cellular licensees, since a cellular licensee may own several licenses.

We assume that all of the current rural cellular licensees are small businesses. Comments filed by small business associations, the Organization for the Protection and Advancement of Small Telephone Companies (OPASTCO), state that  $\frac{2}{3}$  of its 440 members provide cellular service,<sup>9</sup> and comments filed by the Rural Cellular Association (RCA) state that its members serve 80 cellular service areas.<sup>10</sup> We recognize that these numbers represent only part of the current rural cellular licensees because there might be other rural companies not represented by either association.

The rules we are adopting generally require cellular stations to make a determination, through calculation or measurement, as to whether a transmitter facility will comply with the RF radiation exposure limits. If the facility does not comply with the limits, then the applicant (for a new license, a modification, or a renewal of an existing license) must file an Environmental Assessment (EA) pursuant to the National Environment Policy Act. The vast majority of applicants will find their facilities in compliance with the limits, or take steps such as controlling access around the transmitting facility, and will only need to indicate on their application that they comply with the limits. Many cellular transmission facilities are categorically exempted from making a compliance determination based on power and/or antenna height. The Commission processes roughly 700 applications for cellular transmitters facilities, involving 7,000 site locations, per year. Approximately 2,800 transmitting facilities will exceed categorical exclusion criteria and will require a determination of compliance with our new guidelines, based on calculations or measurements.

Manufacturers of mobile and portable cellular transmitters will have to make measurements, or in some cases calculations, as a condition for equipment authorization. Many of these manufacturers are likely to be the same

as those that will manufacture unlicensed PCS transmitters, as discussed in the radiofrequency device category above. Based on the information presented for radiofrequency devices, as well as our past experience in granting equipment authorization for other types of radiofrequency devices, we estimate that 50 percent of the applications for cellular telephones will be from small businesses. It is estimated that 200 mobile and portable cellular transmitters will require authorization per year.

#### C. Personal Communications Service

The broadband PCS spectrum is divided into six frequency blocks designated A through F. Pursuant to 47 C.F.R. § 24.720(b), the Commission has defined "small entity" for Blocks C and F licensees as firms that had average gross revenues of less than \$40 million in the three previous calendar years. This regulation defining "small entity" in the context of broadband PCS auctions has been approved by the SBA.<sup>11</sup>

The Commission has auctioned broadband PCS licenses in Blocks A, B, and C. We do not have sufficient data to determine how many small businesses under the Commission's definition bid successfully for licenses in Blocks A and B. As of now, there are 90 non-defaulting winning bidders that qualify as small entities in the Block C auction. Based on this information, we conclude that the number of broadband PCS licensees affected by the rule adopted in this *Report and Order* includes the 90 non-defaulting winning bidders that qualify as small entities in the Block C broadband PCS auction.

At present, no licenses have been awarded for Blocks D, E, and F for spectrum. Therefore, there are no small businesses currently providing these services. However, a total of 1,479 licenses will be awarded in the D, E, and F Block broadband PCS auctions, which are scheduled to begin on August 26, 1996. Eligibility for the 493 F Block licensees is limited to "entrepreneurs" with the average gross revenues of less than \$125 million. However, we cannot estimate how many small businesses under the Commission's definition will win F Block licenses, or D and E Block licenses. Given the facts that nearly all radiotelephone companies have fewer than 1,000 employees and that no reliable estimate of the number of

prospective D, E, and F Block licensees can be made, we assume, for purposes of our evaluations and conclusions in this FRFA, that all of the licenses will be awarded to small entities, as that term is defined by the SBA.

After all PCS licenses have been issued, the Commission expects to receive approximately 1,000 applications per year involving 10,000 sites. We anticipate that 3000 sites will not meet the categorical exclusion criteria and will involve a determination of compliance with the RF exposure guidelines.

As in the case of cellular telephones, mobile and portable PCS transmitters will have to undergo measurement or modeling to determine compliance with the RF radiation limits as a condition of equipment authorization. Again, we estimate that 50% of the manufacturers will be small businesses. Although we have authorized fewer than ten PCS transmitters, it is estimated that eventually 50 of such devices will be authorized each year.

#### D. Private Land Mobile Radio Services, Specialized Mobile Radio

Pursuant to 47 C.F.R. § 90.814(b)(1), the Commission has defined "small entity" for geographic area 800 MHz and 900 MHz SMR licenses as firms that had average gross revenues of less than \$15 million in the three previous calendar years. This regulation defining "small entity" in the context of 800 MHz and 900 MHz SMR has been approved by the SBA.<sup>12</sup>

The rule adopted in this *Report and Order* applies to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of less than \$15 million. Since the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Commission was unable

<sup>12</sup> See Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool, PR Docket No. 89-553, Second Order on Reconsideration and Seventh Report and Order, 11 FCC Rcd 2639, 2693-702 (1995), 60 FR 48913 September 21, 1995 Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, PR Docket No. 93-144, First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rulemaking, 11 FCC Rcd 1463 (1995), 61 FR 6212, February 16, 1996.

<sup>9</sup> OPASTCO Comments at 1-2 (filed January 9, 1995).

<sup>10</sup> RCA Comments at 2 (filed January 9, 1995).

<sup>11</sup> See Implementation of Section 309(j) of the Communications Act—Competitive Bidding, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5532, 5581-84 (1994), 59 FR 37566 (July 22, 1994).

to request information regarding the number of small businesses in this category. We do know that one of these firms has over \$15 million in revenues. We assume, for purposes of our evaluations and conclusions in this FRFA, that the remaining existing extended implementation authorizations may be held by small entities, as that term is defined by the SBA.

The Commission recently held auctions for geographic area licenses in the 900 MHz SMR band. There were 60 winning bidders who qualified as small entities under the Commission's definition in the 900 MHz auction. Based on this information, we conclude that the number of geographic area SMR licensees affected by the rule adopted in this *Report and Order* includes these 60 small entities.

No auctions have been held for 800 MHz geographic area SMR licenses. Therefore, no small entities currently hold these licenses. A total of 525 licenses will be awarded for the upper 200 channels in the 800 MHz geographic area SMR auction. However, the Commission has not yet determined how many licenses will be awarded for the lower 230 channels in the 800 MHz geographic area SMR auction. There is no basis to estimate, moreover, how many small entities within the SBA's definition will win these licenses. Given the facts that nearly all radiotelephone companies have fewer than 1,000 employees and that no reliable estimate of the number of prospective 800 MHz licensees can be made, we assume, for purposes of our evaluations and conclusions in this FRFA, that all of the licenses will be awarded to small entities, as that term is defined by the SBA.

The Commission receives about 3,000 applications for covered SMR transmitters facilities per year. Approximately 1,000 transmitters will exceed categorical exclusion criteria and will require a determination of compliance. In addition, as in the case of cellular telephones and PCS, mobile and portable covered SMR transmitters will have to undergo measurement or modeling to determine compliance with MPE and/or SAR requirements. It is estimated that 200 of such devices will require authorization per year.

#### E. Satellite Communications Services

The Commission has not developed a definition of small entities applicable to satellite communications licensees. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules applicable to radiotelephone

companies. This definition provides that a small entity is a radiotelephone company employing fewer than 1,500 persons.

Satellite systems authorized by the Commission can be divided into the following categories: mobile satellite service (MSS) non-geostationary satellite orbit (NGSO) (low or medium orbit satellites); mobile satellite service geostationary; mobile satellite service ship stations; and fixed satellite service.

In the MSS NGSO category the commission has divided its spectrum allocation into small and large NGSO. In the small NGSO or small low Earth-orbit (LEO) satellite service there are three existing and three pending or further licensees, all of which may be considered small business entities in the context of this analysis. These licensees are authorized in the VHF/UHF bands.

In the large LEO MSS category of MSS NGSO there are three existing licensees and three pending or future licensees in the 1.6/2.5 GHz band. The three existing are probably not small business entities and the three pending are probably small business entities. In the category of geostationary MSS the Commission has licensed one consortium, in the 1.5/1.6 GHz band, that comprises many small business entities.

The fixed satellite service (FSS) has generally been authorized in the 4/6 and 11/12 GHz band. There are three FSS licensees, that serve domestic US markets, none of which are small business entities. There are also two licensees serving international markets with FSS authorizations and these entities may be considered small business entities.

It should be noted that in most of the satellite areas discussed above the Commission issues one license to an entity but generally issues blanket license authority for thousands or even hundreds of thousands of earth stations or hand held transceivers. In this analysis we have considered satellite companies that have less than 1500 employees to be small business entities. Therefore, we are concluding that small business entities are largely affected by this proceeding in the satellite area.

The Commission receives about 600 applications for satellite facilities per year. All applicants must make a determination of compliance with the limits, based on calculations or measurements.

#### F. Radio Broadcast Service

The SBA has defined small radio broadcast service entities based on their "annual receipts" specifically in 13 CFR § 104, and its calculations include an averaging process. We do not currently

require submission of financial data from licensees that we could use to apply the SBA's definition of a small business. Thus, for purposes of estimating the number of small entities to which the rules apply, we are limited to considering the revenue data that are publicly available, and the revenue data on which we rely may not correspond completely with the SBA definition of annual receipts.

Under SBA criteria for determining annual receipts, if a concern has acquired an affiliate or been acquired as an affiliate during the applicable averaging period for determining annual receipts, the annual receipts in determining size status include the receipts of both firms. 13 CFR.

§ 121.104(d)(1). The SBA defines affiliation in 13 CFR. § 121.103. While the Commission refers to an affiliate generally as a station affiliated with a network, the SBA's definition of affiliate is analogous to our attribution rules. Generally, under the SBA's definition, concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both. 13 CFR. § 121.103(a)(1). The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. 13 CFR.

§ 121.103(a)(2). Instead of making an independent determination of whether radio and television stations were affiliated based on SBA's definitions, we relied on the data bases available to us to afford us that information.

We have performed a study based on the data contained in the BIA Publications, Inc. Master Access Television Analyzer Database, which lists a total of 1,141 full-power commercial television stations. Low Power Television (LPTV) Stations and translator stations are discussed in paragraph H below. It should be noted that the percentage figures derived from the data base may be underinclusive because the data base does not list revenue estimates for noncommercial educational stations, and these are therefore excluded from our calculations based on the data base. Non-commercial stations are subject to the requirements adopted in the Report and Order. The data indicate that, based on 1995 revenue estimates, 440 full-power commercial television stations had an estimated revenue of 10.5 million dollars or less. That represents 54 percent of commercial television stations with revenue estimates listed in the BIA program. The data base does not

list estimated revenues for 331 stations. Using an extreme scenario, if those 331 stations for which no revenue is listed are counted as small stations, there would be a total of 771 stations with an estimated revenue of 10.5 million dollars or less, representing approximately 68 percent of the 1,141 commercial television stations listed in the BIA data base.

Alternatively, if we look at owners of commercial television stations as listed in the BIA data base, there are a total of 488 owners. The data base lists estimated revenues for 60 percent of these owners, or 295. Of these 295 owners, 156 or 53 percent had annual revenues of less than \$10.5 million. Using an extreme scenario, if the 193 owners for which revenue is not listed are assumed to be small, the total of small entities would constitute 72 percent of owners.

In summary, based on the foregoing extreme analysis using census data, we estimate that our rules will apply to as many as 1,150 commercial and non-commercial television stations (78 percent of all stations) that could be classified as small entities. Using the extreme analysis based on the data in the BIA data base, we estimate that as many as approximately 771 commercial television stations (about 68 percent of all commercial television stations) could be classified as small entities. As we noted above, these estimates are based on a definition that we believe greatly overstates the number of television broadcasters that are small businesses. Further, it should be noted that under the SBA's definitions, revenues of affiliates that are not television stations should be aggregated with the television station revenues in determining whether a concern is small. The estimates overstate the number of small entities since the revenue figures on which they are based do not include or aggregate such revenues from non-television affiliated companies.

In addition, according to the SBA's regulations, a radio broadcasting station must have annual gross receipts of \$5.0 million or less in order to qualify as a small business concern.<sup>13</sup> There are approximately 10,250 commercial radio broadcasting stations and 1,810 noncommercial radio broadcast stations of all sizes in the nation, with approximately 5,200 different commercial licensees. For the same reasons as above, the exact number of small radio broadcasting entities to which the elimination of the rule will apply is unknown. Based on 1996 revenue estimates, the BIA Publications,

Inc. Master Access Analyzer Database indicates that 3,314 commercial radio stations had an estimated revenue of \$5.0 million or less. That represents approximately 32 percent of commercial radio stations with revenue estimates listed in the BIA program. The data base does not list estimated revenue for 6,571 stations. Using the most extreme scenario, if those 6,571 stations for which no revenue estimates is listed are counted as small stations, there would be a total of 9,885 stations with an estimated revenue of \$5.0 or less, representing approximately 96 percent of the 10,257 commercial radio stations listed in the BIA data base.

Alternatively, if we look at owners of commercial radio stations as listed in the BIA data base, there are a total of 5,207 owners. The data base lists estimated revenues for 29 percent of these owners, or 1,532. Of these 1,532 owners, 1,344 or 88 percent had annual revenue of less than \$5.0 million. Using the most extreme scenario, if the 3,675 owners for which revenue estimates are not listed are assumed to be small businesses, then the total of small entities would constitute 96 percent of commercial radio station owners. Further, many noncommercial radio broadcasters are considered to be small entities. Thus, a large number of licensees of radio broadcast facilities of several types (commercial AM, commercial FM, and noncommercial FM stations) could benefit from the rule amendment herein adopted.

The Commission receives about 1,800 applications for broadcast facilities per year. All applicants must make a determination of compliance with the limits, either by calculation or measurement.

#### G. Stations in the Maritime Services

This item would require licensees and applicants for ship satellite earth terminals to make a determination of compliance with the new RF radiation requirements. The Commission has not developed a definition of small entities applicable to ship satellite earth station licensees. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules applicable to radiotelephone companies. This definition provides that a small entity is a radiotelephone company employing fewer than 1,500 persons.

Ship MSS is similar to geostationary MSS, as discussed above, except that earth stations are aboard maritime vessels rather than traditional earth stations in the MSS. In the area of ship MSS the Commission has two pending licensees for operation of the satellite

service, one of which can be considered small business.

The Commission receives about 272 applications for ship earth stations per year. All applicants must make a determination of compliance with the new RF radiation limits.

#### H. Experimental, Auxiliary, and Special Broadcast and Other Program Distribution Services

This service involves a variety of transmitters, generally used to relay broadcast programming to the public (through translator and booster stations) or within the program distribution chain (from a remote news gathering unit back to the station). It also includes Instructional Television Fixed Service stations, which are used to relay programming to the home or office, similar to that provided by cable television systems. The Commission has not developed a definition of small entities applicable to broadcast auxiliary licensees. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules applicable to radiotelephone companies. This definition provides that a small entity is a radiotelephone company employing fewer than 1,500 persons.

There are currently 2,637 FM translators and boosters, 4,910 TV translators, and 1,903 Low Power TV stations which will be affected by the new requirements.<sup>14</sup> There are also 2,032 ITFS licensees. The FCC does not collect financial information on any broadcast facility and the Department of Commerce does not collect financial information on these auxiliary broadcast facilities. We believe, however, that most, if not all, of these auxiliary facilities, including Low Power TV stations, could be classified as small businesses by themselves. We also recognize that most translators and boosters are owned by a parent station which, in some cases, would be covered by the revenue definition of small business entity discussed above. These stations would likely have annual revenues that exceed the SBA maximum to be designated as a small business (either \$5 million for a radio station or \$10.5 million for a TV station). As we indicated earlier, 96% of radio stations and 78% of TV stations are designated as small.

The approximate number of annual applications processed by the Commission for this service is 1,032. All of these applications would be required to have a determination made regarding

<sup>13</sup> 13 CFR. § 121.201.

<sup>14</sup> FCC news release, Broadcast Station Totals as of June 30, 1996, released July 10, 1996.

compliance with the new RF radiation limits.

#### I. Multipoint Distribution Service (MDS)

This service involves a variety of transmitters, which are used to relay programming to the home or office, similar to that provided by cable television systems. The Commission has not developed a definition of small entities applicable to MDS licensees. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules applicable to radiotelephone companies. This definition provides that a small entity is a radiotelephone company employing fewer than 1,500 persons. There are 1,800 MDS stations currently licensed and 500 applications for additional channels.

The approximate number of annual applications processed by the Commission for MDS is 900. It is estimated that of the 900 processed, only 113 will not meet the categorical exclusion criteria and have to make a determination of compliance with the RF radiation limits.

#### J. Paging and Radiotelephone Service, and Private Land Mobile Radio Services, Paging Operations

Since the Commission has not yet approved a definition for paging services, we will utilize the SBA's definition applicable to radiotelephone companies, i.e., an entity employing less than 1,500 persons.

The Commission anticipates that a total of 15,531 non-nationwide geographic area licenses will be granted or auctioned. The geographic area licenses will consist of 3,050 MTA licenses and 12,481 EA licenses. In addition to the 47 Rand McNally MTAs, the Commission is licensing Alaska as a separate MTA and adding three MTAs for the U.S. territories, for a total of 51 MTAs. No auctions of paging licenses has been held yet, and there is no basis to determine the number of licenses that will be awarded to small entities. Given the fact that nearly all radiotelephone companies have fewer than 1,000 employees, and that no reliable estimate of the number of prospective paging licensees can be made, we assume, for purposes of this FRFA, that all the 15,531 geographic area paging licenses will be awarded to small entities, as that term is defined by the Small Business Administration (SBA).

We estimate that the approximately 600 current paging carriers could take the opportunity to partition and/or disaggregate a license to obtain an additional license through partitioning or disaggregation. We estimate that up

to 48,393 licensees or potential licensees could take the opportunity to partition and/or disaggregate a license or obtain a license through partitioning or disaggregation. This number is based on the total estimate of paging carriers (approximately 600) and non-nationwide geographic area licenses to be awarded (15,531) and our estimate that each license will probably not be partitioned and/or disaggregated to no more than three parties. Given the fact that nearly all radiotelephone companies have fewer than 1,000 employees, and that no reliable estimate of the number of future paging licensees can be made, we assume for purposes of this FRFA that all of the licensees will be awarded to small businesses. We believe that it is possible that a significant number of up to approximately 48,393 licensees or potential licensees who could take the opportunity to partition and/or disaggregate a license or who could obtain a license through partitioning and/or disaggregation will be a small business.

The Commission receives about 10,000 applications for paging facilities per year. Approximately 1,176 transmitters will exceed categorical exclusion criteria and will require a determination of compliance with the new guidelines, either by measurement or calculation.

#### K. Experimental Radio Service

The Commission has not developed a definition of small entities applicable to experimental licensees. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules applicable to radiotelephone companies. This definition provides that a small entity is a radiotelephone company employing fewer than 1,500 persons.<sup>15</sup> Since the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Commission was unable to request information regarding the number of small experimental radio businesses and is unable at this time to make a precise estimate of the number of Experimental Radio Services which are small businesses.

The majority of experimental licenses are issued to companies such as Motorola and Department of Defense contractors such as Northrop, Lockheed and Martin Marietta. Businesses such as these may have as many as 200 licenses at one time. The majority of these applications, 70 percent, are from

entities such as these. Given this fact, the remaining 30 percent of applications, we assume, for purposes of our evaluations and conclusions in this FRFA, will be awarded to small entities, as that term is defined by the SBA.

The Commission processes approximately 1,000 applications a year for experimental radio operations. About half or 500 of these are renewals and the other half are for new licenses. Approximately 500 of these applications will be required to make an initial determination of compliance with our new RF guidelines.

#### IV. Summary of Projected Reporting, Recordkeeping and Other Compliance Requirements:

Applicants that are subject to the new RF radiation guidelines (i.e., not categorically excluded), are required to make a statement on any application filed with the Commission indicating that they comply with the RF radiation limits. Technical information supporting that statement must be retained by the applicant, and provided to the Commission upon request. In some cases, the applicant will be able to determine compliance by making calculations or reading applicable literature, including OST Bulletin No. 65. In other cases, detailed measurements of the transmitting facility may be necessary. In addition, steps to control access to the facility, such as warning signs or fences, may be required. Manufacturers of radio transmitting equipment will, as indicated above, need to make MPE and/or SAR measurements that will need to form part of the manufacturer's records for equipment authorization.

#### Reporting

Reporting requirements are limited to certain classes of applicants and licensees for which the potential for human exposure to RF emissions is the greatest. Most applicants and licensees are categorically excluded from routinely evaluating their facilities, operations or transmitters for compliance with the new RF exposure guidelines. The National Environmental Policy Act (NEPA), upon which our rules are based, allows "categorical exclusion" of large classes of actions that generally do not provide an opportunity for causing significant environmental impact, such as would result from human exposure to RF emissions in excess of the guidelines. In this case, the "actions" excluded are the granting of Commission applications and authorizations. Therefore, we are categorically excluding many applications submitted to the

<sup>15</sup> 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812.



Commission from routine evaluation for compliance with the RF guidelines. This exclusion significantly limits burden on our regulatees, including many small businesses. The category exclusions apply to all radio services except those listed in section IV above and the radio amateur service. This means, for example, that all land mobile and public safety two-way systems are categorically excluded.

Applicants in services that are not categorically excluded may also be categorically excluded from determining compliance based on antenna location or station power. Applicants who are not categorically excluded are required to make a statement on certain application forms filed with the Commission indicating whether they comply with our environmental rules. This action by a licensee or applicant is the primary reporting requirement. In addition, supporting information (such as measurement data, site drawings, and calculations) may be requested, in certain cases, to justify the statement made on a Commission form.

#### *Recordkeeping*

The Commission has no specific recordkeeping requirements related to compliance with the RF exposure guidelines. This has not changed from the rules previously in place regarding compliance with RF exposure guidelines. The Commission does reserve the right to request information supporting the answer an applicant gives on a form. Such information would normally be technical in nature and could involve a report of calculations performed or measurements made to determine compliance. Therefore, many applicants and licensees may keep information related to their compliance on file in some form for their own records. The Commission provides applicants with guidance on performing calculations or measurements through its OST Bulletin No. 65, which is being updated to reflect the new guidelines. In many cases, an applicant or licensee can easily use this bulletin to determine compliance through the use of charts, figures and tables. This largely eliminates the need for keeping a detailed analytic report in many cases. Manufacturers of equipment who are required to evaluate portable or mobile devices would likely have to perform more detailed analysis and keep on file a specific technical report for review by the Commission if requested. Also, in a few cases involving multiple transmitters at large antenna farms detailed measurement studies may be necessary. Reports of such studies would be retained by an

applicant to provide evidence of compliance if required.

#### *Other Compliance Requirements*

As was true for the previous rules, there are no specific compliance requirements, as such. Under the Commission's NEPA rules, applicants and licensees are required to submit an Environmental Assessment (EA) if they do not comply with our RF exposure guidelines (47 CFR § 1.1311). An EA is a detailed accounting of the consequences created by a specific action that may have a significant environmental impact, in this case a Commission authorization of a transmitter or facility that exceeds the RF guidelines. An EA would be evaluated by the Commission to determine whether the authorization should be granted in view of the environmental impact. In reality, this leads to a *de facto* compliance requirement, since most applicants and licensees who are not categorically excluded (see above) undertake measures to ensure compliance before submitting an application in order to avoid the preparation of a costly and time-consuming EA. For this reason EAs are rarely filed with the Commission. This has not changed from the existing rules. As for determining compliance, as mentioned above, the Commission provides applicants with specific guidance in the form of a technical bulletin. This bulletin is designed to minimize the effort and burden required by an applicant to determine compliance with the guidelines prior to submitting an application. Many options are available for ensuring compliance, including restricting access to an area where high RF levels exist, using warning signs or fences to provide notice of potential RF exposure, use or protective shielding or warning devices, reduction of power when people are in high RF areas and, in the case of portable and mobile devices, designing devices to minimize RF absorption in the body of the user.

#### *Skills Needed to Meet Requirements*

If a station is not categorically excluded, then the licensee or applicant must make a determination of whether the station will comply with the RF radiation limits. This study can be done by calculation or measurement, depending upon the situation. The calculations can be done in many cases by a radio technician or engineer familiar with radio propagation. If measurements are necessary, then a radio technician or engineer will also be required.

The applicant must indicate on its application that it meets the NEPA requirements and, therefore, does not exceed the RF radiation limits. This is usually done by checking a box on a form, which can be done by a clerical person.

#### *V. Steps Taken to Minimize the Economic Impact on Small Entities*

The Commission has made every effort to devise ways to minimize the impact of the new RF limits on small entities, while protecting the health and safety of the public. However, we have incorporated sufficient flexibility in the procedures to make compliance as minimally burdensome as possible. We have taken the following steps to ease the impact on small businesses.

1. The Commission has created a categorical exclusion that requires only those transmitters that appear to have the highest potential to create a significant environmental effect to perform an environmental evaluation.
2. The Commission will revise OST Bulletin No. 65 to provide guidance for determining compliance with FCC-specified RF limits. This should be of particular assistance to small businesses since it will provide straightforward information that should allow a quick understanding of the requirements and a quick assessment of the potential for compliance problems without the need for an expensive consultant or measurement.
3. The Commission allows various methods for ensuring compliance with RF limits such as fencing, warning signs, labels, and markings, locked doors in roof-top areas, and the use of personal monitors and RF protective clothing in an occupational environment.
4. The Commission has rejected its initial proposal to adopt induced and contact currents limits due to the lack of reliable equipment available.
5. The Commission has specified a variety of acceptable testing methods and procedures that may be used to determine compliance. This will allow each small business to choose a procedure that best meets its needs in the manner that is least burdensome to it.
6. The Commission has always allowed multiple transmitter sites, i.e., antenna farms, to pool their resources and have only one study done for the entire site. This is very common at sites that have multiple entities such as TV, FM, paging, cellular, etc. In most circumstances, rather than each licensee hiring a separate consultant and submitting a study showing their compliance with the guidelines, one



consulting radio technician or radio engineer can be hired by the group of licensees. The consultant surveys the entire site for compliance and gives his recommendations and findings to each of the licensees at the site. The licensees can then use the findings to show their compliance with the guidelines. In this way the cost of compliance is minimized as no one licensee has to pay the entire consulting fee, rather just a portion of it.

The Commission has determined cost of performing an environmental evaluation is minimal for 87 percent of the businesses required to determine compliance. In normal situations, an environmental evaluation can be performed within 1 hour or less with the use of the revised OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation." In situations involving devices intended to be used in close proximity to the body, only PCS, cellular, and SMR portable and mobile devices will be required to evaluate compliance under the Commission's equipment authorization process.

#### Report to Congress

The Commission shall send a copy of this Final Regulatory Flexibility Analysis, along with this Report and Order, in a report to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. § 801(a)(1)(A). A copy of this FRFA will also be published in the Federal Register.

#### List of Subjects

##### 47 CFR Part 1

Environmental impact statement, Federal Communications Commission, Radio, Reporting and recordkeeping requirements.

##### 47 CFR Part 2

Federal Communications Commission, Radio, Reporting and recordkeeping requirements.

##### 47 CFR Part 15

Computer technology, Federal Communications Commission,

Reporting and recordkeeping requirements.

##### 47 CFR Part 24

Federal Communications Commission, Personal communications service.

##### 47 CFR Part 97

Communications equipment, Federal Communications Commission, Radio.

Federal Communications Commission  
William F. Caton,  
*Acting Secretary.*

#### Rule Changes

Title 47 of the Code of Federal Regulations, parts 1, 2, 15, 24 and 97 are amended as follows:

### PART 1—PRACTICE AND PROCEDURE

1. The authority citation for part 1 continues to read as follows:

Authority: 47 U.S.C. 151, 154, 303 and 309(j) unless otherwise noted.

2. Section 1.1307 is amended by revising paragraph (b), by removing notes 1, 2 and 3 following paragraph (b), and by adding new paragraph (e) to read as follows:

**§ 1.1307 Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.**

\* \* \* \* \*

(b) In addition to the actions listed in paragraph (a) of this section, Commission actions granting construction permits, licenses to transmit or renewals thereof, equipment authorizations or modifications in existing facilities, require the preparation of an Environmental Assessment (EA) if the particular facility, operation or transmitter would cause human exposure to levels of radiofrequency radiation in excess of the limits in § 1.1310 and § 2.1093 of this chapter. Applications to the Commission for construction permits, licenses to transmit or renewals thereof, equipment authorizations or modifications in existing facilities must contain a statement confirming compliance with the limits unless the facility, operation, or transmitter is

categorically excluded, as discussed below. Technical information showing the basis for this statement must be submitted to the Commission upon request.

(1) The exposure limits in § 1.1310 are generally applicable to all facilities, operations and transmitters regulated by the Commission. However, a determination of compliance with the exposure limits in § 1.1310, and preparation of an EA if the limits are exceeded, is necessary only for facilities, operations and transmitters that fall into the categories listed in Table 1, or those specified in paragraph (b)(2) of this section. All other facilities, operations and transmitters are categorically excluded from making such studies or preparing an EA, except as indicated in paragraphs (c) and (d) of this section. For purposes of Table 1, "rooftop" means the roof or otherwise outside, topmost level or levels of a building structure that is occupied as a workplace or residence and where either workers or the general public may have access. The term "power" in column 2 of Table 1 refers to total operating power of the transmitting operation in question in terms of effective radiated power (ERP), equivalent isotropically radiated power (EIRP), or peak envelope power (PEP), as defined in § 2.1 of this chapter. For the case of the Cellular Radiotelephone Service, subpart H of part 22 of this chapter; the Personal Communications Service, part 24 of this chapter and covered Specialized Mobile Radio Service operations, part 90 of this chapter, the phrase "total power of all channels" in column 2 of Table 1 means the sum of the ERP or EIRP of all co-located simultaneously operating transmitters of the facility. When applying the criteria of Table 1, radiation in all directions should be considered. For the case of transmitting facilities using sectorized transmitting antennas, applicants and licensees should apply the criteria to all transmitting channels in a given sector, noting that for a highly directional antenna there is relatively little contribution to ERP or EIRP summation for other directions.

TABLE 1.—TRANSMITTERS, FACILITIES AND OPERATIONS SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

Service (Title 47 CFR Rule Part)	Evaluation required if:
Experimental Radio Services (part 5) .....	Power > 100W ERP (164W EIRP).
Radio Frequency Devices (part 15) .....	Millimeter wave devices operating in one of the following bands 46.7–46.8 GHz, 59.0–64.0 GHz or 76.0–77.0 GHz (see §§ 15.253 and 15.255 of this chapter).
	Unlicensed personal communications service devices operating under subpart D of this chapter.

TABLE 1.—TRANSMITTERS, FACILITIES AND OPERATIONS SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION—Continued

Service (Title 47 CFR Rule Part)	Evaluation required if:
Multipoint Distribution Service (subpart K of part 21) .....	<i>Non-rooftop antennas</i> : height above ground level to radiation center < 10 m and power > 1640 W EIRP. <i>Rooftop antennas</i> : Power > 1640W EIRP.
Paging and Radiotelephone Service (subpart E of part 22) .....	<i>Non-rooftop antennas</i> : height above ground level to radiation center < 10 m and power > 1000W ERP (1640 W EIRP). <i>Rooftop antennas</i> : power > 1000W ERP (1640W EIRP).
Cellular Radiotelephone Service (subpart H of part 22) .....	<i>Non-rooftop antennas</i> : height above ground level to radiation center < 10 m and total power of all channels > 1000W ERP (1640 W EIRP). <i>Rooftop antennas</i> : total power of all channels > 1000W ERP (1640W EIRP).
Personal Communications Services (part 24) .....	(1) Narrowband PCS (subpart D): <i>non-rooftop antennas</i> : height above ground level to radiation center <10 m and total power of all channels > 1000W ERP (1640 W EIRP). <i>Rooftop antennas</i> : total power of all channels > 1000W (1640W EIRP). (2) Broadband PCS (subpart E): <i>non-rooftop antennas</i> : height above ground level to radiation center <10 m and total power of all channels > 2000W ERP (3280 W EIRP). <i>Rooftop antennas</i> : total power of all channels > 2000W (3280W EIRP).
Satellite Communications (part 25) .....	All included.
Radio Broadcast Services (part 73) .....	All included.
Experimental, auxiliary, and special broadcast and other program distributional services (part 74).	Subparts A, G, L: power > 100W ERP. Subpart I: <i>non-rooftop antennas</i> : height above ground level to radiation center < 10 m and power > 1640 W EIRP. <i>Rooftop antennas</i> : power > 1640W EIRP.
Stations in the Maritime Services (part 80) .....	Ship earth stations only.
Private Land Mobile Radio Services Paging Operations (part 90) .....	<i>Non-rooftop antennas</i> : height above ground level to radiation center < 10 m and power > 1000W ERP (1640 W EIRP). <i>Rooftop antennas</i> : power > 1000W ERP (1640W EIRP).
Private Land Mobile Radio Services Specialized Mobile Radio ("covered" providers only—see below) <sup>1</sup> (part 90).	<i>Non-rooftop antennas</i> : height above ground level to radiation center < 10 m and total power of all channels > 1000W ERP (1640 W EIRP). <i>Rooftop antennas</i> : total power of all channels > 1000W ERP (1640W EIRP).
Amateur Radio Service (part 97) .....	Transmitter power > 50W PEP.

<sup>1</sup> Note: "Covered" SMR providers includes geographic area SMR licensees in the 800 MHz and 900 MHz bands that offer real-time, two-way switched voice service that is interconnected with the public switched network and Incumbent Wide Area SMR licensees, as defined in § 20.3 of this chapter.

(2) Mobile and portable transmitting devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services (PCS), the Satellite Communications Services, the Maritime Services (ship earth stations only) and covered Specialized Mobile Radio Service providers authorized under subpart H of part 22, part 24, part 25, part 80, and part 90 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, as specified in §§ 2.1091 and 2.1093 of this chapter. All unlicensed PCS and millimeter wave devices are also subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, as specified in § 15.253(f), § 15.255(g), and § 15.319(i) of this chapter. All other mobile, portable, and unlicensed transmitting devices are categorically excluded from routine environmental evaluation for RF exposure under §§ 2.1091 and 2.1093 of this chapter except as specified in paragraphs (c) and (d) of this section.

(3) In general, when the guidelines specified in § 1.1310 are exceeded in an accessible area due to the emissions

from multiple fixed transmitters, actions necessary to bring the area into compliance with the guidelines are the shared responsibility of all licensees whose transmitters produce field strengths or power density levels at the area in question in excess of 1% of the exposure limits applicable to their particular transmitter.

(i) Applicants for proposed (not otherwise excluded) transmitters, facilities or modifications that would cause non-compliance with the limits specified in § 1.1310 at an accessible area previously in compliance must submit an EA if emissions from the applicant's transmitter or facility would result in a field strength or power density at the area in question that exceeds 1% of the exposure limit applicable to that transmitter or facility.

(ii) Renewal applicants whose (not otherwise excluded) transmitters or facilities contribute to the field strength or power density at an accessible area not in compliance with the limits specified in § 1.1310 must submit an EA if emissions from the applicant's transmitter or facility results in a field strength or power density at the area in

question that exceeds 1% of the exposure limit applicable to that transmitter or facility.

(4) *Transition Provisions.* For applications filed with the Commission prior to January 1, 1997, Commission actions granting construction permits, licenses to transmit or renewals thereof, equipment authorizations, or modifications in existing facilities require the preparation of an Environmental Assessment if the particular facility, operation or transmitter would cause human exposure to levels of radiofrequency radiation that are in excess of the requirements contained in paragraphs (b)(4) (i) through (iii) of this section. These transition provisions do not apply to applications for equipment authorization of mobile, portable, and unlicensed devices specified in paragraph (b) (2) of this section.

(i) For facilities and operations licensed or authorized under parts 5, 21 (subpart K), 25, 73, 74 (subparts A, G, I, and L), and 80 of this chapter, the "Radio Frequency Protection Guides" recommended in "American National Standard Safety Levels with Respect to

Human Exposure to Radio Frequency Electromagnetic Fields, 300 kHz to 100 GHz", (ANSI C95.1-1982), issued by the American National Standards Institute (ANSI) and copyright 1982 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York shall apply. With respect to subpart K of part 21 and subpart I of Part 74 of this chapter, these requirements apply only to multipoint distribution service and instructional television fixed service stations transmitting with an equivalent isotropically radiated power (EIRP) in excess of 200 watts. With respect to subpart L of part 74 of this chapter, these requirements apply only to FM booster and translator stations transmitting with an effective radiated power (ERP) in excess of 100 watts. With respect to part 80 of this chapter, these requirements apply only to ship earth stations.

(ii) For facilities and operations licensed or authorized under part 24 of this chapter, licensees and manufacturers are required to ensure that their facilities and equipment comply with IEEE C95.1-1991 (ANSI/IEEE C95.1-1992), "Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz." Measurement methods are specified in IEEE C95.3-1991, "Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields—RF and Microwave." Copies of these standards are available from IEEE Standards Board, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331. Telephone: 1-800-678-4333. The limits for both

"controlled" and "uncontrolled" environments, as defined by IEEE C95.1-1991, will apply to all PCS base and mobile stations, as appropriate.

(iii) Applications for all other types of facilities and operations are categorically excluded from routine RF radiation evaluation except as provided in paragraphs (c) and (d) of this section.

\* \* \* \* \*

(e) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the regulations contained in this chapter concerning the environmental effects of such emissions. For purposes of this paragraph:

(1) The term "personal wireless service" means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

(2) The term "personal wireless service facilities" means facilities for the provision of personal wireless services;

(3) The term "unlicensed wireless services" means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services; and

(4) The term "direct-to-home satellite services" means the distribution or broadcasting of programming or services by satellite directly to the subscriber's premises without the use of ground

receiving or distribution equipment, except at the subscriber's premises or in the uplink process to the satellite.

3. A new Section 1.1310 is added to read as follows:

**§ 1.1310 Radiofrequency radiation exposure limits.**

The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter. Further information on evaluating compliance with these limits can be found in the FCC's OST/OET Bulletin Number 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation."

Note to Introductory Paragraph: These limits are generally based on recommended exposure guidelines published by the National Council on Radiation Protection and Measurements (NCRP) in "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86, Sections 17.4.1, 17.4.1.1, 17.4.2 and 17.4.3. Copyright NCRP, 1986, Bethesda, Maryland 20814. In the frequency range from 100 MHz to 1500 MHz, exposure limits for field strength and power density are also generally based on guidelines recommended by the American National Standards Institute (ANSI) in Section 4.1 of "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE C95.1-1992, Copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017.

TABLE 1.— LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3–3.0 .....	614	1.63	*(100)	6
3.0–30 .....	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30–300 .....	61.4	0.163	1.0	6
300–1500 .....	.....	.....	f/300	6
1500–100,000 .....	.....	.....	5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3–1.34 .....	614	1.63	*(100)	30
1.34–30 .....	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30–300 .....	27.5	0.073	0.2	30
300–1500 .....	.....	.....	f/1500	30
1500–100,000 .....	.....	.....	1.0	30

f = frequency in MHz

\* = Plane-wave equivalent power density

Note 1 to Table 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their

employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits

for occupational/controlled exposure also apply in situations when an individual is transient through a location where

occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

Note 2 to Table 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

## **PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS**

1. The authority citation for part 2 continues to read as follows:

Authority: Sec. 4, 302, 303 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154, 302, 303 and 307, unless otherwise noted.

2. A new center heading and § 2.1091 are added to subpart J to read as follows: Radiofrequency Radiation Exposure

### **§ 2.1091 Radiofrequency radiation exposure evaluation: mobile and unlicensed devices.**

(a) Requirements of this section are a consequence of Commission responsibilities under the National Environmental Policy Act to evaluate the environmental significance of its actions. See subpart I of part 1 of this chapter, in particular § 1.1307(b).

(b) For purposes of this section mobile devices are defined as transmitters designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between radiating antennas and the body of the user or nearby persons.

(c) Mobile devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services, the Satellite Communications Services, the Maritime Services and the Specialized Mobile Radio Service authorized under subpart H of part 22, part 24, part 25, part 80 of this chapter (ship earth station devices only) and part 90 of this chapter ("covered" SMR devices only, as defined in the note to Table 1 of § 1.1307(b)(1) of this chapter), are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use if their effective radiated power (ERP) is 1.5 watts or more. Unlicensed personal communications service and unlicensed millimeter wave devices authorized under § 15.253, § 15.255 and subpart D of part 15 of this chapter are also subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, regardless of their power used, unless they meet the definition of a portable device as

specified in § 2.1093(b). All other mobile and unlicensed transmitting devices are categorically excluded from routine environmental evaluation for RF exposure prior to equipment authorization, except as specified in §§ 1.1307(c) and 1.1307(d) of this chapter. Applications for equipment authorization of mobile and unlicensed transmitting devices subject to routine environmental evaluation must contain a statement confirming compliance with the limits specified in paragraph (d) of this section as part of their application. Technical information showing the basis for this statement must be submitted to the Commission upon request.

(d) The limits to be used for evaluation are specified in § 1.1310 of this chapter. All unlicensed personal communications service (PCS) devices shall be subject to the limits for general population/uncontrolled exposure.

(1) For purposes of analyzing mobile transmitting devices under the occupational/controlled criteria specified in § 1.1310 of this chapter, time-averaging provisions of the guidelines may be used in conjunction with typical maximum duty factors to determine maximum likely exposure levels.

(2) Time-averaging provisions may not be used in determining typical exposure levels for devices intended for use by consumers in general population/uncontrolled environments as defined in § 1.1310 of this chapter. However, "source-based" time-averaging based on an inherent property or duty-cycle of a device is allowed. An example of this is the determination of exposure from a device that uses digital technology such as a time-division multiple-access (TDMA) scheme for transmission of a signal. In general, maximum average power levels must be used to determine compliance.

(3) Compliance with exposure guidelines for mobile and unlicensed devices can be accomplished by the use of warning labels and by providing users with information concerning minimum separation distances from transmitting structures and proper installation of antennas.

4. A new section 2.1093 is added to subpart J to read as follows:

### **§ 2.1093 Radiofrequency radiation exposure evaluation: portable devices.**

(a) Requirements of this section are a consequence of Commission responsibilities under the National Environmental Policy Act to evaluate the environmental significance of its actions. See subpart I of Part 1 of this chapter, in particular § 1.1307(b).

(b) For purposes of this section portable devices are defined as transmitters designed to be used within 20 centimeters of the body of the user.

(c) Portable devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services, the Satellite Communications services, the Maritime Services and the Specialized Mobile Radio Service authorized under subpart H of part 22 of this chapter, part 24 of this chapter, part 25 of this chapter, part 80 of this chapter (ship earth station devices only), part 90 of this chapter ("covered" SMR devices only, as defined in the note to Table 1 of § 1.1307(b)(1) of this chapter), and portable unlicensed personal communication service and millimeter wave devices authorized under § 15.253, § 15.255 or subpart D of part 15 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use. All other portable transmitting devices are categorically excluded from routine environmental evaluation for RF exposure prior to equipment authorization, except as specified in §§ 1.1307(c) and 1.1307(d) of this chapter. Applications for equipment authorization of portable transmitting devices subject to routine environmental evaluation must contain a statement confirming compliance with the limits specified in paragraph (d) of this section as part of their application. Technical information showing the basis for this statement must be submitted to the Commission upon request.

(d) The limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate ("SAR") in Section 4.2 of "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE C95.1-1992, Copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86, Section 17.4.5. Copyright NCRP, 1986, Bethesda, Maryland 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards. The criteria to be used are

specified in paragraphs (d)(1) and (d)(2) of this section.

(1) Limits for Occupational/Controlled exposure: 0.4 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 8 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 20 W/kg, as averaged over an 10 grams of tissue (defined as a tissue volume in the shape of a cube). Occupational/Controlled limits apply when persons are exposed as a consequence of their employment provided these persons are fully aware of and exercise control over their exposure. Awareness of exposure can be accomplished by use of warning labels or by specific training or education through appropriate means, such as an RF safety program in a work environment.

(2) Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure. Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section.

(3) Compliance with SAR limits can be demonstrated by either laboratory measurement techniques or by computational modeling. Methodologies and references for SAR evaluation are described in numerous technical publications including "IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields—RF and Microwave," IEEE C95.3–1991.

(4) For purposes of analyzing portable transmitting devices under the occupational/controlled criteria, the time-averaging provisions of the MPE guidelines identified in § 1.1310 of this chapter can be used in conjunction with typical maximum duty factors to determine maximum likely exposure levels.

(5) Time-averaging provisions of the MPE guidelines identified in § 1.1310 of this chapter may not be used in determining typical exposure levels for portable devices intended for use by consumers, such as hand-held cellular telephones, that are considered to operate in general population/uncontrolled environments as defined above. However, "source-based" time-averaging based on an inherent property or duty-cycle of a device is allowed. An example of this would be the determination of exposure from a device that uses digital technology such as a time-division multiple-access (TDMA) scheme for transmission of a signal. In general, maximum average power levels must be used to determine compliance.

## **PART 15—RADIO FREQUENCY DEVICES**

1. The authority citation for part 15 continues to read as follows:

Authority: Secs. 4, 302, 303, 304, 307 and 624A of the Communications Act of 1934, as amended, 47 U.S.C. 154, 302, 303, 307 and 544A.

2. Section 15.253 is amended by revising paragraph (f) to read as follows:

### **§ 15.253 Operation within the bands 46.7–46.9 GHz and 76.0–77.0 GHz.**

\* \* \* \* \*

(f) Regardless of the power density levels permitted under this section, devices operating under the provisions of this section are subject to the radiofrequency radiation exposure requirements specified in § 1.1307(b), § 2.1091 and § 2.1093 of this chapter, as appropriate. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

3. Section 15.255 is amended by revising paragraph (g) to read as follows:

### **§ 15.255 Operation within the band 59.0–64.0 GHz.**

\* \* \* \* \*

(g) Regardless of the power density levels permitted under this section, devices operating under the provisions of this section are subject to the radiofrequency radiation exposure requirements specified in § 1.1307(b), § 2.1091 and § 2.1093 of this chapter, as appropriate. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these

requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

4. Section 15.319 is amended by revising paragraph (i), to read as follows:

### **§ 15.319 General technical requirements.**

\* \* \* \* \*

(i) Unlicensed PCS devices are subject to the radiofrequency radiation exposure requirements specified in § 1.1307(b), § 2.1091 and § 2.1093 of this chapter, as appropriate. All equipment shall be considered to operate in a "general population/uncontrolled" environment. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

## **PART 24—PERSONAL COMMUNICATIONS SERVICES**

1. The authority citation for part 24 continues to read as follows:

Authority: 47 U.S.C. 154, 301, 302, 303, 309, and 332, unless otherwise noted.

2. Section 24.52 is revised to read as follows:

### **§ 24.52 RF hazards.**

Licensees and manufacturers are subject to the radiofrequency radiation exposure requirements specified in § 1.1307(b), § 2.1091 and § 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

## **PART 97—AMATEUR RADIO SERVICE**

1. The authority citation for part 97 continues to read as follows:

Authority: 48 Stat. 1066, 1082, as amended; 47 U.S.C. §§ 154, 303. Interpret or apply 48 Stat. 1064–1068, 1081–1105, as amended; 47 U.S.C. §§ 151–155, 301–609, unless otherwise noted.

2. Section 97.13 is amended by adding paragraph (c) to read as follows:

**§ 97.13 Restrictions on station location.**

\* \* \* \* \*

(c) Before causing or allowing an amateur station to transmit from any place where the operation of the station could cause human exposure to levels of radiofrequency (RF) radiation in excess of that allowed under § 1.1310 of this chapter, the licensee is required to take certain actions. A routine RF radiation evaluation, as discussed in § 1.1307(b) of this chapter, is required if the transmitter power exceeds 50 watts peak envelope power; otherwise the operation is categorically excluded from routine RF radiation evaluation except as specified in § 1.1307(c) and § 1.1307(d) of this chapter. Where the

routine evaluation indicates that the RF radiation could be in excess of the limits contained in § 1.1310 of this chapter, the licensee must take action to prevent such an occurrence. Further information on evaluating compliance with these limits can be found in the FCC's OST/OET Bulletin Number 65, "Evaluation Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation."

3. Section 97.503 is amended by revising paragraphs (b)(1), (b)(2), and (b)(3), and adding entry 10 to the table in paragraph (c) to read as follows:

**§ 97.503 Element standards.**

\* \* \* \* \*

(b) \* \* \*

(1) Element 2: 35 questions concerning the privileges of a Novice Class operator license. The minimum passing score is 26 questions answered correctly.

(2) Element 3(A): 30 questions concerning the privileges of a Technician Class operator license. The minimum passing score is 22 questions answered correctly.

(3) Element 3(B): 30 questions concerning the privileges of a General Class operator license. The minimum passing score is 22 questions answered correctly.

\* \* \* \* \*

(c) \* \* \*

	Topics	2	3(A)	3(B)	4(A)	4(B)
	* * * * *					
(10) Radiofrequency environmental safety practices at an amateur station .....		5	5	5	0	0

[FR Doc. 96-20082 Filed 8-5-96; 2:01 pm]  
BILLING CODE 6712-01-P

**47 CFR Part 73****[MM Docket No. 96-87; RM-8782]****Radio Broadcasting Services; Macomb, IL**

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** The Commission, at the request of WMS1, Inc., allots Channel 240A at Macomb, Illinois, as the community's third local commercial FM transmission service. See 61 FR 18540, April 26, 1996. Channel 240A can be allotted to Macomb in compliance with the Commission's minimum distance separation requirements with a site restriction of 0.5 kilometers (0.3 miles) south to avoid a short-spacing to the licensed site of Station WMXG(FM), Channel 241C1, Clinton, Iowa. The coordinates for Channel 240A at Macomb are North Latitude 40-27-09 and West Longitude 90-40-12. With this action, this proceeding is terminated.

**DATES:** Effective September 16, 1996. The window period for filing applications will open on September 16, 1996, and close on October 17, 1996.

**FOR FURTHER INFORMATION CONTACT:** Sharon P. McDonald, Mass Media Bureau, (202) 418-2180.

**SUPPLEMENTARY INFORMATION:** This is a synopsis of the Commission's *Report*

*and Order*, MM Docket No. 96-87, adopted July 26, 1996, and released August 2, 1996. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Reference Center (Room 239), 1919 M Street, NW., Washington, DC. The complete text of this decision may also be purchased from the Commission's copy contractors, International Transcription Service, Inc., (202) 857-3800, 2100 M Street, NW., Suite 140, Washington, DC 20037.

**List of Subjects in 47 CFR Part 73**

Radio broadcasting.

Part 73 of title 47 of the Code of Federal Regulations is amended as follows:

**PART 73—[AMENDED]**

1. The authority citation for part 73 continues to read as follows:

Authority: Sections 303, 48 Stat., as amended, 1082; 47 U.S.C. 154, as amended.

**§ 73.202 [Amended]**

2. Section 73.202(b), the Table of FM Allotments under Illinois, is amended by adding Channel 240A at Macomb.

Federal Communications Commission.

John A. Karousos,

Chief, Allocations Branch, Policy and Rules Division, Mass Media Bureau.

[FR Doc. 96-20080 Filed 8-6-96; 8:45 am]

BILLING CODE 6712-01-F

**DEPARTMENT OF TRANSPORTATION****Research and Special Programs Administration****49 CFR Part 192****[Docket PS-124; Amdt. 192-78]****RIN 2137-AC25****Regulatory Review; Gas Pipeline Safety Standards; Correction**

**AGENCY:** Research and Special Programs Administration (RSPA), DOT.

**ACTION:** Correction to final rule.

**SUMMARY:** This document contains a correction to the final rule (Docket PS-124) changing miscellaneous gas pipeline safety regulations that was published Thursday, June 6, 1996 (61 FR 28770) in the Federal Register.

**EFFECTIVE DATE:** August 7, 1996.

**FOR FURTHER INFORMATION CONTACT:** Albert C. Garnett, at (202) 366-2036, regarding this correction or the Dockets Unit, at (202) 366-5046, regarding copies of this document or other material in the docket.

**SUPPLEMENTARY INFORMATION:****Background**

The final rule that includes the subject correction changed miscellaneous gas pipeline safety regulations to provide clarity, eliminate unnecessary or overly burdensome requirements, and foster economic growth. As set out in the final rule under the heading Executive Order 12866 and DOT Regulatory Policies and