Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Petition of Cingular Wireless L.L.C. for a	)	
Declaratory Ruling that Provisions of the Anne	)	WT – Docket No. 02-100
Arundel County Zoning Ordinance are Preempted	)	
as Impermissible Regulation of Radio Frequency	)	
Interference Reserved Exclusively to the Federal	)	
Communications Commission	)	
	)	

MEMORANDUM OPINION AND ORDER

Adopted: July 3, 2003 **Released: July 7, 2003**

By the Chief, Wireless Telecommunications Bureau:

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I. INTRODUCTION

1. In this order, we find that federal law preempts provisions of the Anne Arundel County, Maryland ("County") zoning ordinance involving radio frequency interference ("RFI"). The provisions require that, prior to receiving a County zoning certificate, owners and users of telecommunications facilities must show that their facilities will not degrade or interfere with the County's public safety communications systems. [1] The Ordinance provisions also permit the County to revoke a zoning

[1] *See* Article 28, §§ 1-101(14B), 1-128(a),(c), 10-125(j)(1)-(2), (k)(1)-(2) of the Anne Arundel County, Code ("Ordinance").

certificate where degradation or interference is found. On April 23, 2002, Cingular Wireless LLC ("Cingular") filed a Petition for Declaratory Ruling that these Ordinance provisions are preempted.[2] The County filed a Motion to Dismiss Cingular's Petition claiming the courts, and not the Commission, have exclusive jurisdiction over final zoning actions of local governments affecting the placement, construction and modification of personal wireless service facilities.[3]

2. For the reasons stated below, we find that the challenged provisions of the County's Ordinance regulate RFI, not traditional zoning functions, and therefore are preempted by federal law. We therefore grant Cingular's Petition for Declaratory Ruling and deny the County's Motion to Dismiss. At the same time, we remain concerned about interference to the County's public safety communications system and we expect that the parties will continue to work cooperatively to resolve these problems, consistent with our previous guidance.[4] We therefore require the County, Cingular and Nextel Communications, Inc. ("Nextel") to report to the Commercial Wireless Division of the Wireless Telecommunications Bureau (Bureau) in 30 and 90 days after release of this Order to describe the progress of mitigation efforts in the County.

II. BACKGROUND

A. History of Interference with Anne Arundel County Public Safety Communications

3. In 1989, the County began operating a public safety communications system in the 800 MHz band, which is used by the police department, sheriff's department, and fire department.[5] In 1997, the County began experiencing radio frequency interference to its public safety communications system from certain wireless telecommunications networks.[6] In late 1998, the County wrote to the Commission concerning these problems, and the County and the carriers subsequently met several times with Commission staff.[7] The meetings were helpful in establishing productive working relationships and addressing many of the County's interference concerns. Nonetheless, due to the engineering challenges created by operating public safety and commercial systems on nearby frequencies, some interference issues inevitably remained.[8]

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[2] *See* Petition for Declaratory Ruling filed by Cingular Wireless LLC, dated April 23, 2002 ("Cingular Petition").

[3] *See* Motion to Dismiss filed by the County, dated May 24, 2002 ("Motion to Dismiss").

[4] *See* Wireless Telecommunications Bureau Announces Best Practices Guide for Avoiding Interference Between Public Safety and Commercial Wireless 800 MHz Communications Systems for Immediate Release: February 9, 2001, 2001 WL 114396 (rel. Feb. 9, 2001) ("*Best Practices Guide PN*"). The *Best Practices Guide* was compiled by a working group of subject matter experts to address the problems of interference to public safety networks in the 800 MHz Band and has been endorsed by the Cellular Telecommunications & Internet Association (CTIA) and the Association of Public-Safety Communications Official-International, Inc. (APCO). The *Best Practices Guide* is available at www.apcointl.org.

[5] *See* Letter from James Hobson, attorney for the County, to Marlene H. Dortch, FCC Secretary, dated September 11, 2002, Attachment ("County Fact Sheet"); County Comments, Exhibit B.

[6] *See* County Comments, Exhibits B, F.

[7] *See* County Comments, Exhibit A.

[8] *See* Improving Public Safety Communications in the 800 MHz Band, *Notice of Proposed Rulemaking*, 17 FCC Rcd 4873, 4881-4882, ¶¶ 14-18 (2002) ("*800 MHz NPRM*").

4. In 1999, the County determined that because its system was 10 years old and in order to help remedy some of the interference problems, it would need to acquire a new public safety communications system.[9] In March 2001, the County engaged a consultant for a needs analysis concerning the new system.[10] Testing by the consultant revealed 61 existing "dead spots" in areas near commercial radio station antennas, where the County experienced failures in its public safety communications.[11] According to the County, the dead spots put police officers, firefighters and paramedics in difficult and unsafe situations.[12] The consultant found the interference was primarily caused by Nextel and secondarily by Cingular and that the interference centered around Nextel and Cingular's tower sites.[13] According to the consultant, significant carrier input was required for the configuration of the County's new system because the causes of interference can vary considerably and cannot be remedied by a single solution.[14]

5. The County approached both Nextel and Cingular regarding the interference. Nextel was reportedly receptive to assisting the County with mitigating interference by providing transmission information, assisting in site testing, reconfiguring antennas, changing power levels, installing filters, and engineering other methods to decrease interference.[15] However, according to the County, Cingular initially declined to provide interference assessment information and participate in interference testing.[16] Concerned that the $15 million expended on its proposed new system might be wasted, the County determined that any future upgrade of its public safety system was dependent on development of a mechanism to mitigate interference concerns from future telecommunications facilities placements.[17]

B. The Challenged Provisions of Anne Arundel County, Maryland's Zoning Ordinance

6. On January 22, 2002, the County adopted amendments to its zoning Ordinance, which became effective on March 15, 2002, for new facilities and September 11, 2002, for existing facilities.[18] These amendments provide that prior to receiving a County zoning certificate, owners and users of commercial telecommunications facilities must show that their facilities will not degrade or interfere with the County's public safety radio systems.[19] The Ordinance defines "telecommunications facilities" to include

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[9] *See* County Fact Sheet; County Comments, Exhibit B.

[10] *See* County Comments, Exhibit B.

[11] In initial filings, the County claimed there were 41 dead spots, which subsequently increased to 61. *See* County Comments at 2; County Fact Sheet at 1.

[12] *See* County Comments at 2, Exhibit B.

[13] *See* County Comments at (iii).

[14] *See* County Comments at (iii), Exhibit B; County Fact Sheet at 2.

[15] *See* County Comments at 4; County Fact Sheet at 2.

[16] *See* County Fact Sheet at 2.

[17] *Id.*

[18] *See* Letter from James Hobson, attorney for the County, to Marlene H. Dortch, FCC Secretary, dated February 5, 2003 at 2 ("February 5, 2003 County Letter").

[19] *See* Anne Arundel County Code, Article 28, Preamble.

towers, antennas, microwave dishes, and in-building wireless communications systems.[20] The Ordinance requires an owner or user to obtain a zoning certificate prior to "using or altering" any telecommunications facility and defines the term "altering" to include "any change in configuration, transmit frequency, or power level."[21] The Ordinance requires each applicant to obtain a certification from an independent consultant acceptable to the County, before constructing, operating or altering any facility, that the facility or the applicant's use of the facility will not degrade or interfere with the County's public safety communications system.[22] In addition, each owner and user must submit, on an annual basis, a certification from an engineer acceptable to the County that the radio frequency emissions from each facility meet the applicable Commission standards and guidelines.[23] The Ordinance provides that where a facility or use of a facility degrades or interferes with the County's public safety communications system, or if the requisite certifications are not made, the zoning certificate may be revoked.[24]

7. Since the time the Ordinance provisions were enacted, the County and commercial licensees have engaged in discussions concerning possible future revisions of the Ordinance.[25] As an outgrowth of these discussions, the County made revisions to certain provisions of the Ordinance other than those addressing RFI.[26] The record also indicates that the County has instituted a number of new measures to reduce interference and ease the regulatory burden on commercial carriers, including: 1) eliminating in practice the requirement of independent engineer certifications, thereby allowing carrier staff engineers to supply all required certifications; 2) completing a spectrum swap agreement with Nextel, which would relocate its public safety spectrum to the far ends of the bands utilized by commercial carriers; and 3) substantially upgrading its public safety system.[27] The Ordinance's provisions relating to RFI, however, remain substantively unchanged.

8. Although the record is unclear regarding when it began to do so, it is undisputed that the County is enforcing the challenged provisions.[28] While a number of carriers operating in the County have

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[20] *Id.*, Article 28, § 1-101(14B).

[21] *Id.*, Article 28, § 1-128(a).

[22] *Id.*, Article 28, § 10-125(j)(l).

[23] *Id.*, Article 28, § 10-125(k)(1). The Commission's RF emissions guidelines are set forth at 47 C.F.R. §§ 1.1310, 2.1093.

[24] Anne Arundel County Code, Article 28, § 10-125(j)(2), (k)(2).

[25] *See* Letter from James Hobson, attorney for the County, to Marlene H. Dortch, FCC Secretary, dated August 26, 2002 ("August 26, 2002 County Letter"); Letter from Brian Fontes, Cingular Vice President, to Marlene H. Dortch, FCC Secretary, dated September 11, 2002, Attachment A ("September 11, 2002 Cingular Letter").

[26] Specifically, in August 2002, the County amended the Ordinance to waive setback requirements for facilities in operation at the end of 2001 and liberalize the use of non-residential structures and multifamily dwellings to facilitate collocation of mobile phone towers and other facilities. *See* County Comments at 5-6.

[27] *See* Letter from James Hobson, attorney for the County, to Marlene H. Dortch, FCC Secretary, dated January 27, 2003 ("January 27, 2003 County Letter").

[28] *See* February 5, 2002 County Letter; Letter from Nicole E. Dozier, Zoning Enforcement Supervisor for the County, to Southwestern Bell Mobile Systems, dated January 16, 2003 ("Zoning Enforcement

filed some required certifications,[29] several carriers are not doing so.[30] Stating the impossibility of compliance with the Ordinance, Nextel and Cingular, neither of which has ever furnished certifications, assert that the County's implementation of its Ordinance is actively obstructing their communications service operations.[31] Specifically, they claim that the County is refusing to issue permits for new tower sites, as well as use permits for existing sites, because their applications do not contain the non-interference certification.[32] Cingular has also advised that it has received correspondence stating that the County will impose fines and penalties for Cingular's failure to obtain a use permit with the required certification for an existing facility for which no application was ever filed.[33]

C. The Record in this Proceeding

9. Cingular's Petition was placed on public notice on May 7, 2002. The Commission received thirteen comments and four reply comments, the majority of which supported Cingular's Petition.[34] After the comment period closed, four local governments, the City of Cumberland, Maryland, Village of Schaumburg, Illinois, City of Irvine, California, and County of Harford, Maryland, submitted *ex parte* filings generally supporting the County's position.[35] In addition, the Local and State Government Advisory Committee ("LSGAC") filed a recommendation that the Commission should refrain from preempting the Ordinance at least until after the Commission resolves the pending rulemaking proceeding regarding RF interference with 800 MHz public safety services.[36]

Letter"), submitted as an attachment to Letter from Robert Kirk, attorney for Cingular, to Marlene H. Dortch, FCC Secretary, dated January 27, 2003 ("January 27, 2003 Cingular Letter").

[29] *See* February 5, 2003 County Letter at 2; Letter from James Hobson, attorney for the County, to Marlene H. Dortch, FCC Secretary, dated October 4, 2002 ("October 4, 2002 County Letter"); January 27, 2003 County Letter.

[30] *See* February 5, 2003 County Letter at 2. *Ex parte* filings by carriers confirm the County's assertions. *See, e.g.* Letter from Roger Sherman, attorney for Sprint, to Marlene H. Dortch, FCC Secretary, dated January 8, 2003 (contending that the County is refusing to grant the carrier's applications because of the carrier's failure to provide non-interference certifications); Letter from Martin L. Stern, attorney for T Mobile USA Inc., to Marlene H. Dortch, FCC Secretary, dated December 19, 2002 (same).

[31] *See* Letter from James Goldstein, attorney for Nextel, to Marlene H. Dortch, FCC Secretary, dated January 28, 2003 ("January 28, 2003 Nextel Letter"); January 27, 2003 Cingular Letter at 2.

[32] *Id.*

[33] *See* Zoning Enforcement Letter.

[34] Parties filing comments and reply comments, and the short forms by which they are referenced in this order, are listed in the Appendix.

[35] *See ex parte* filings from H. Jack Price, City Solicitor, City of Cumberland, Maryland, dated September 4, 2002 ("City of Cumberland *ex parte")*; A. Frank Carven, County Attorney, Harford County, Maryland, dated September 23, 2002; Rita Elsner, Assistant Village Attorney, Village of Schaumburg, Illinois, dated September 23, 2002; William M. Martacarena, Attorney for City of Irvine, California, dated November 18, 2002.

[36] *See 800 MHz NPRM*, 17 FCC Rcd 4873; Letter from Kenneth Fellman, Chairman, Local and State Government Advisory Committee ("LSGAC"), to Marlene H. Dortch, FCC Secretary, dated October 8, 2002 ("October 8, 2002 LSGAC Letter").

10. On May 24, 2002, the County filed a Motion to Dismiss Cingular's Petition, arguing that the courts, and not the Commission, have exclusive jurisdiction over final zoning actions of local governments. Cingular filed an Opposition to the Motion to Dismiss maintaining that the County's provisions regulate RFI and therefore this matter falls within the exclusive jurisdiction of the Commission.[37]

III. DISCUSSION

11. As described below, we find that the challenged provisions of the County's zoning Ordinance infringe on the Commission's exclusive jurisdiction over RFI and are preempted under the doctrine of field preemption. We therefore grant Cingular's Petition for Declaratory Ruling. In addition, we find that because these provisions attempt to regulate RFI, rather than traditional zoning functions, the exclusive jurisdiction of the courts under section 332 of the Act is not triggered. Accordingly, we deny the County's Motion to Dismiss. We recognize, however, that resolution of the issue of preemption will not in itself resolve the interference problems the County has experienced in its public safety communications system. We expect carriers to render full cooperation with a local government's efforts to mitigate interference to its public safety communications system. Accordingly, we require the County, Cingular, and Nextel to report to the Bureau's Commercial Wireless Division on the status of mitigation efforts in the County in 30 and 90 days after release of this order.

A. Exclusive Federal Regulation of RF Interference

12. The Supremacy Clause of Article VI of the Constitution provides Congress with the power to preempt state law.[38] The Supreme Court has found that Congress' preemption power extends to both state and local ordinances.[39] There are various forms of federal preemption.[40] Express preemption occurs when the language of the federal statute reveals an express congressional intent to preempt state law.[41] The courts have not found local regulation of RFI expressly preempted.[42] Field preemption occurs when Congress has legislated comprehensively, thus occupying an entire field of regulation and leaving no room for the States to supplement federal law,[43] or if an Act of Congress touches a field in which the federal interest is so dominant that the federal system is presumed to prohibit enforcement of State laws

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[37] *See* Opposition to Motion to Dismiss filed by Cingular, dated June 3, 2002 ("Cingular Opposition").

[38] *Louisiana Public Service Commission v. FCC*, 476 U.S. 355, 368 (1986) ("*Louisiana Public Service Commission"*).

[39] *See Wisconsin Pub. Intervenor v. Mortier*, 501 U.S. 597, 605 (1991).

[40] *See Louisiana Public Service Commission*, 467 U.S. at 368-69 (describing the various forms of federal preemption).

[41] *See, e.g., Southwestern Bell Wireless Inc. v. Johnson County Board of County Commissioners*, 199 F.3d 1185, 1190 (10th Cir 1999) ("*Johnson County*") (*citations omitted).*

[42] *Id*.

[43] *See Freeman v. Burlington Broadcasters Inc*., 204 F.3d 311, 320 (2nd Cir. 2000) ("*Freeman"*)

on the same issue.[44] The courts have identified field preemption as the "most pertinent" of the various forms of federal preemption to the issue of local regulation of RFI.[45] Under field preemption, Congressional legislation and an agency's regulations and decisions determine whether and to what extent federal law preempts state or local regulation.[46] Preemption may result not only from action taken by Congress; a federal agency acting within the scope of its Congressionally delegated authority may also preempt State regulation.[47] It is well settled that federal regulations have the same preemptive force as federal statutes.[48]

13. The Commission and the federal courts have consistently found that the Commission's authority in the area of RFI is exclusive and any attempt by State or local governments to regulate in the area of RFI is preempted.[49] The Commission addressed this issue almost 20 years ago in *960 Radio*.[50] In that proceeding, a local zoning board issued a conditional use permit to an FM radio facility subject to a restriction that the applicant "not operate the new facility so as to produce electronic interference to existing facilities" or to TV translators.[51] In a petition for declaratory ruling, the owner of the FM facility sought to void the requirement on the ground that "jurisdiction to control interference over the airwaves rests exclusively with the [Commission]."[52] The Commission found that sections 2, 301, and 303(c)-(f) of the Communications Act,[53] taken together, "comprehensively regulate interference, [and therefore]

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[44] *See Johnson County*, 199 F.3d at 1190 (citations omitted). *See also, Freeman,* 204 F.3d at 320 (noting "field preemption may be understood as a species of conflict preemption: a state law that falls within a preempted field conflicts with Congress' intent (either express or implied) to exclude state regulation").

[45] *See, e.g., Freeman*, 204 F.3d at 320.

[46] *See Johnson County*, 199 F. 3d at 1190.

[47] *Louisiana Public Service Commission,* 467 U.S. at 369. *See also Johnson County,* 199 F. 3d at 1192 (*citing Hillsborough County v. Automated Med. Lab, Inc.,* 471 U.S. 707, 713 (1985) (state laws can be preempted by federal regulations as well as by federal statutes)).

[48] *Fidelity Savings and Loan Ass'n v. de las Cuesta*, 458 U.S. 141, 153-54 (1983); *Freeman*, 204 F.3d at 321.

[49] *See, e.g.,* CTIA Comments at 4-8; Sprint Comments at 2-3; TIA Comments at 4; ARRL Comments at 4-5; Pinnacle Comments at 1-2; Weblink Comments at 3; AWS Comments at 6-7. In addition to field preemption, some commenters maintain that local regulation of RFI is expressly preempted under the language of the Communications Act, which, through the Supremacy Clause, endows the Commission with "comprehensive powers to promote and realize the vast potentialities of radio." *See* CTIA Comments at 3-4; RCA Reply Comments at 2; Verizon Wireless Comments at 2.

[50] In the Matter of 960 Radio, Inc., *Memorandum Opinion and Declaratory Ruling*, FCC 85-578, 1985 WL 193883 (Nov. 4, 1985) ("*960 Radio*").

[51] *Id.* at ¶3.

[52] *Id.*

[53] *See 960 Radio* at ¶5. Section 2 of the Act states that the provisions of the Act apply to "all interstate and foreign transmission of energy by radio, which originaltes and/or is received within the United States." 47 U.S.C. § 152(a). Section 301 lists, among the purposes of the Act, to maintain federal control over all the channels of radio transmission. 47 U.S.C. § 301. Section 303(c)-(f) identifies the Commission's general powers with respect to radio transmission, including assigning frequencies, determining station power, and "mak[ing] such regulations not inconsistent with law as it may deem necessary to prevent interference between stations to carry out the provisions of this Act." 47 U.S.C. § 303(c)-(f).

Congress undoubtedly intended federal regulation to completely occupy that field to the exclusion of local and state governments."[54] The Commission noted that Supreme Court[55] and Commission[56] precedent supported this conclusion. The Commission further found that "any doubt about [the Commission's] jurisdiction to regulate interference was removed" with Congress' statement in the House Conference Report to the 1982 provisions of section 302 of the Act, which provides:

> The Conference Substitute is further intended to clarify the reservation of exclusive jurisdiction to the Federal Communications Commission over matters involving RFI. Such matters shall not be regulated by local or state law, nor shall radio transmitting apparatus be subject to local or state regulation as part of any effort to resolve an RFI complaint. The Conferees believe that radio transmitter operators should not be subject to fines, forfeitures or other liability imposed by any local or state authority as a result of interference appearing in home electronic equipment or systems. Rather, the Conferees intend that regulation of RFI phenomena shall be imposed only by the Commission.[57]

For these reasons, the Commission found the local zoning board's interference restriction on a radio station in a conditional use permit was preempted under federal law.

14. In *Mobilecomm*, the former Common Carrier Bureau applied the Commission's rationale in *960 Radio* to invalidate provisions of a local zoning ordinance that required a paging facility operator to notify the town's planning and zoning commission when it changed the power and/or frequency of its transmission and required that "[n]o operation shall be permitted which produces any perceptible electromagnetic interference with normal radio or television reception in any area within or without the town."[58] The Bureau recognized that although *Mobilecomm* involved operations in a different service, *i.e.,* public land mobile service (PLMS), it was still governed by the decision in *960 Radio,* which involved FM radio broadcasting.[59] The Bureau reasoned that the sections of the Communications Act and the legislative history that the Commission relied on in *960 Radio* governed the interference at issue in *Mobilecomm*, "since Title III of the Communications Act, including sections 301, and 303(c), (d), (e) and (f) applies to PLMS stations such as that operated by Mobilecomm."[60] In preempting the ordinance, the Bureau stated that the law establishing the Commission's exclusive jurisdiction over RFI "is clear" and that the local government "must look to the Commission for interference regulation."[61]

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[54] *960 Radio* at ¶4.

[55] *See 960 Radio* at ¶5 (*citing Head v. New Mexico Board of Examiners in Optometry*, 374 U.S. 424, 430 n. 6 (1963) (the FCC's jurisdiction "over technical matters" associated with the transmission of broadcast signals "is clearly exclusive").

[56] *See 960 Radio* at ¶6 (*citing* Roy Hofheinz, 9 Rad.Reg. (P&F) 784c, 788 (1953)).

[57] H.R. Conf. Rep. No. 97-765, at 33 (1982), reprinted in 1982 U.S.C.C.A.N. 2261, 2277.

[58] *See* In the Matter of Mobilecomm of New York Inc., *Memorandum Opinion and Declaratory Ruling*, 2 FCC Rcd 5519 ¶3, n. 3 (CCB 1987) ("*Mobilecomm"*).

[59] 2 FCC Rcd at 5520 ¶9.

[60] *Id*.

[61] 2 FCC Rcd at 5520 ¶8.

15. Recent federal court decisions are consistent with the Commission's conclusions in *960 Radio* and *Mobilecomm*.[62] In *Johnson County*, for example, the Tenth Circuit considered a local zoning provision that was very similar to the Ordinance provisions at issue here. In that case, the local zoning authority adopted an "interference regulation" that prohibited wireless telecommunications towers and antennas from operating in a manner that interfered with public safety communications.[63] The regulation also authorized the county's zoning authority to determine when interference existed and, after proper notice and opportunity for a hearing, to force the offending facility to cease operations.[64] Citing the Communications Act,[65] Commission regulations,[66] Commission decisions,[67] and an informal opinion rendered by the Chief of the Commercial Wireless Division in the same matter,[68] the Court determined that "Congress intended federal regulation of RFI issues to be so pervasive as to occupy the field."[69] The Court noted that "this analysis is consistent with decisions of virtually all courts considering RFI preemption."[70] For these reasons, the Court concluded that the local regulation was void under the doctrine of field preemption.[71]

16. Similarly, in *Freeman*, the Second Circuit considered whether federal law preempted a zoning permit condition that required the users of a communications tower to remedy any interference with reception in homes in the area.[72] The city zoning administrator had issued notices of violation to a

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[62] *See Johnson County*, 199 F.3d 1185; *Freeman*, 204 F.3d 311. *See also Broyde v. Gotham Tower, Inc.*, 13 F.3d 994, 997 (6th Cir. 1994) (affirming dismissal of nuisance suit regarding interference with home electronic equipment because RFI fell within the Commission's exclusive jurisdiction over radio transmission technical matters); *Still v. Michaels*, 791 F.Supp. 248, 252 (D.Ariz. 1992) (dismissing nuisance suit claiming interference from radio transmissions because "obstruction[s] to the Commission's ability to regulate radio frequencies are preempted").

[63] 199 F.3d at 1188.

[64] *Id.*

[65] 199 F.3d at 1190-92 (finding sections 2(a), 301 and 303(f) of the Act, and the legislative history to the 1982 provisions of section 302 of the Act, evidence Congress' intent that the Commission have exclusive jurisdiction over RFI).

[66] 199 F.3d at 1192 (finding the Commission's regulations "show its broad authority over RFI issues"). The Court noted that a function of the Commission's Compliance and Information Bureau, with assistance from the Wireless Telecommunications Bureau, is to "[r]educe or eliminate interference to authorized communciations." *See* 47 C.F.R. §§ 0.111(e), 0.131(h). The Commission has promulgated rules to resolve interference disputes. *See, e.g.,* 47 C.F.R. §§ 22.353, 24.237, 27.58, 90.173(b), 90.403(e). The Commission can assess a forfeiture for failure to comply with an FCC permit or license. *See* 47 C.F.R. § 1.80(a)(1), (b)(4) (suggested forfeiture amount for interference is $7,000 per violation).

[67] 199 F.3d at 1192 (*citing 960 Radio* and *Mobilecomm*).

[68] *Id.* at 1189 (*citing* Letter from David L. Furth, Chief, Commercial Wireless Division, Wireless Telecommunications Bureau, to Roger Kroh, Director of Planning and Development, Johnnson County Office of Planning, Development and Codes (July 2, 1997) ("CWD 1997 Letter")).

[69] 199 F.3d at 1193.

[70] *See Johnson County,* 199 F. 3d at 1192 (citing numerous federal and state court decisions holding that RFI falls within the Commission's exclusive jurisdiction).

[71] 199 F.3d at 1192.

[72] 204 F.3d at 311.

radio station operator, cellular phone company, and city fire and ambulance service, all of which used the communications tower, on the grounds that their operations had caused interference with electronic devices in violation of the zoning permit conditions. The city's zoning board, however, dismissed the notice of violation on the grounds of federal preemption. On appeal, the Second Circuit determined that, based on an analysis of the statute,[73] legislative history,[74] Commission regulations[75] and Commission decisions,[76] the field of radio frequency interference was occupied by federal law and affirmed the zoning authority's decision that it was preempted from enforcing the zoning permit condition.[77] The Court reasoned that "allowing local zoning authorities to condition construction and use permits on any requirement to eliminate or remedy RF interference stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."[78]

17. Taken together, these Commission and court decisions clearly establish that the Commission has sole jurisdiction to regulate RFI, to the exclusion of provisions in local zoning or other regulations.

B. Preemption of the County's Zoning Ordinance Provisions.

18. Based on Commission precedent in *960 Radio* and *Mobilecomm*, and the federal court decisions in *Johnson County* and *Freeman*, we find that the County's provisions constitute an attempt to regulate RFI and therefore are preempted under the doctrine of field preemption. A review of the provisions shows that their intent and effect are to regulate the operations – not the placement, construction and modification – of licensed facilities.[79] As in *Mobilecomm*, the County's zoning Ordinance requires all wireless carriers to obtain prior certification from the County before constructing, operating or altering their facilities.[80] The Ordinance also gives the County, similar to the ordinance struck down in *Johnson County,* unfettered discretion to determine whether interference exists and when interference is considered resolved, without any apparent objective standard for the determination.[81] Again similar to the *Johnson County* ordinance, where interference is found, the Ordinance permits the County to revoke the zoning permit to force the carrier to cease operations at the offending facility, even where the facility otherwise complies with all appropriate land use regulations.[82] The Ordinance's

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[73] 204 F.3d at 320 (*citing* 47 U.S.C. §§ 151, 302a, 303).

[74] 204 F.3d at 320-21 (*citing* the legislative history of the 1982 provisions of section 302 of the Act).

[75] 204 F.3d at 321 (*citing* Commission rules regulating the technologies involved in FM broadcasting set forth at 47 C.F.R. §§ 73.201-73.333).

[76] 204 F.3d at 322 (*citing 960 Radio* and *Mobilecomm*).

[77] 204 F.3d at 320-322.

[78] 204 F.3d at 325 (internal quotation marks and citations omitted).

[79] *See* CTIA Comments at 2 (the provisions are an explicit attempt to set up a "local scheme for controlling and mitigating RFI"); VoiceStream Comments at 2; TIA Comments at 4.

[80] *See* Anne Arundel County Code, Article 28, § 1-128(a); *see also* Cingular Reply Comments at 9; Weblink Comments at 4-5.

[81] *See* Anne Arundel County Code, Article 28, § 10-125(j)(2), (k)(2); *see also* Verizon Comments at 4; TIA Comments at 3-4; VoiceStream Reply Comments at 2; Pinnacle Comments at 1-2.

requirements concerning radio frequency engineering studies further demonstrate its focus on radio frequency regulation rather than local land use concerns.[83] Moreover, under the Ordinance, "facilities" are broadly defined to include not only structures that are traditionally regulated by zoning ordinances, such as towers, antennas and microwave dishes, but also facilities that would not normally be subject to zoning ordinances such as in-building wireless communications systems.[84]

19. We disagree with the County's argument that the provisions are not a direct regulation of RFI, but rather a "perfectly lawful effort to assure itself that a carrier is complying with FCC standards."[85] The County maintains that the Ordinance contains no mechanism to order the carrier to change its chosen configuration, transmit frequency or power level, but rather helps to assure the collection and updating of reliable information essential to local efforts to mitigate interference.[86] The County further states that the Ordinance's requirement for a zoning certificate of use when a telecommunications facility is "altered" is not a direct regulation of RFI.[87] According to the County, it is not attempting to substitute its own technical standards or to regulate beyond the federal guidelines through the Ordinance. Although the County does not purport to prescribe particular technical parameters, however, the fact remains that by asserting authority to prohibit operation that it determines causes public safety interference, the County is effectively regulating federally licensed operation, much as in *Johnson County* and *Mobilecomm.* Such regulation of operation is different in kind from traditional zoning regulation of the physical facility such as height limitations, setback requirements, screening or painting guidelines, structural safety standards, and the like.[88] Therefore, we find that the County's Ordinance regulates beyond traditional zoning functions and impermissibly extends into the regulation of RFI.

20. For similar reasons, we reject the County's argument that the Commission lacks jurisdiction to consider Cingular's Petition, and we therefore deny the County's Motion to Dismiss. The County argues that Cingular's Petition should be dismissed for lack of jurisdiction pursuant to section 332(c)(7)(B)(v) of the Act,[89] which in most instances reserves to the courts exclusive jurisdiction over final zoning actions of local governments affecting the placement, construction and modification of personal wireless service facilities.[90] The County also maintains there can be no "field preemption"

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[82] *See* Anne Arundel County Code, Article 28, § 10-125(j)(2), (k)(2); *see also* Verizon Comments at 2; TIA Comments at 4; Cingular Reply Comments at 9; Pinnacle Comments at 4.

[83] *See* Anne Arundel County Code, Article 28, §§ 10-125(j)(1), (k)(1); 1-128(a), (c). S*ee also* Pinnacle Comments at 2.

[84] *Id.* at Article 28, § 1-101(14B); *see also* Cingular Reply Comments at 9.

[85] *See* County Comments at 7, 12.

[86] *See* County Comments at 12.

[87] *Id*.

[88] The legislative history to the 1996 Act generally describes local zoning functions to include "visual, aesthetic or safety concerns." *See* H.R. Conf. Rep. No. 458, 104th Cong., 2d Sess., 208. *See also AT&T Wireless PCS v. Virginia Beach*, 155 F.3d 423, 427 (4th Cir. 1998) ("*AT&T Wireless PCS"*) (traditional bases of zoning regulation include preserving the character of a neighborhood and avoiding aesthetic blight).

[89] 47 U.S.C. § 332(c)(7)(B)(v).

[90] Motion to Dismiss at 1. Section 332(c)(7)(B)(v) provides that "Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with [section 332(c)(7)] may, within 30 days after such action or failure to act, commence an action in

because section 332(c)(7)(A) reserves to localities authority for regulating RFI through their ability to control "the placement, construction and modification" of telecommunications facilities, except as expressly limited by section 332(c)(7)(B).[91] The County maintains that, under section 332, it shares authority with the Commission in the field of RFI regulation and that because it has not been shown impossible to comply with both the Commission's and the County's regulations, there can be no conflict preemption.[92] The County further maintains that the Tenth Circuit's decision in *Johnson County*[93] supports its argument that jurisdiction over the instant dispute resides with the courts and not the Commission because, in that case, the Commission's role was "purely advisory" and the matter was ultimately decided by the federal courts.[94] Finally, citing decisions from the First[95] and Fourth Circuit Courts of Appeals,[96] the County argues that its authority over zoning of personal wireless service facilities extends to regulation of RFI, and that even if it were to deny a zoning permit in a particular case, the courts have not found such action to constitute a prohibition of wireless services in violation of section 332(c)(7).[97]

21. We find that section 332(c)(7)(B)(v) does not limit the Commission's jurisdiction to consider Cingular's Petition because the Ordinance provisions do not regulate the "placement, construction, and modification" of facilities, and therefore do not fall within the scope of section 332(c)(7).[98] Specifically, we disagree with the County's contention that under section 332(c)(7), the County "shares" authority with the Commission to regulate RFI. The County argues in effect that the provisions in the Telecommunications Act of 1996 expanded local authority at the expense of the Commission by overruling preexisting decisions that local regulation of RFI was preempted. However, section 332(c)(7), which is entitled "Preservation of local zoning authority," only *preserves* local "decisions regarding the placement, construction, and modification of personal wireless service facilities."[99] The Conference

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any court of competent jurisdiction," except that a challenge to State or local regulation that is impermissibly based on the environmental effects of RF emissions may be brought before the Commission. 47 U.S.C. § 332(c)(7)(B)(v). The legislative history further clarifies that except for cases based on the environmental effects of radio frequency emissions, "the courts shall have exclusive jurisdiction of all other disputes arising under this section." *See* H.R. Conf. Rep. No. 458, 104th Cong., 2d Sess., 208.

91 *See* County Reply Comments at 12.

92 *See* County Reply Comments at 11-12.

93 199 F.3d 1185.

94 Motion to Dismiss at 3-4.

95 *Town of Amherst v. Omnipoint Communications*, 173 F.3d 9, 17 (1st Cir. 1999).

96 *AT&T Wireless PCS*, 155 F.3d at 431.

97 *See* County Comments at 13-14; County Reply Comments at 9-10. Local governments filing in support of the County also argue that the provisions of the Ordinance represent a proper exercise of authority over the placement, construction and modification of wireless facilities. *See, e.g.,* City of Cumberland *ex parte.*

98 *See, e.g.*, Cingular Opposition; USCC Comments at 5; AWS Comments at 6-7. We further note that even if section 332(c)(7) did apply, section 332(c)(7)(B)(v) preserves the Commission's authority to consider petitions based on "the enviornmental effects of radio frequency emissions." 47 U.S.C. § 332(c)(7)(B)(v).

99 47 U.S.C. § 332(c)(7).

Report on the Telecommunications Act of 1996 explains that "[t]he limitations on the role and powers of the Commission under [§ 332(c)(7)] relate to local land use regulations and are not intended to limit or affect the Commission's general authority over radio telecommunications, including the authority to regulate the construction, modification and operation of radio facilities."[100] Thus, the 1996 provisions did not alter the Commission's general authority over radio transmissions granted by earlier communications legislation and affirmed by existing precedent. Indeed, in *Johnson County,* the Court specifically considered the same argument raised by the County and found the regulation at issue did not involve traditional zoning authority – which concerns placement, construction, and modification– but rather extended into radio telecommunications, an area of exclusive Commission authority that is outside section 332(c)(7).[101]

22. The County's reliance on the First Circuit's decision in *Town of Amherst v. Omnipoint Communications Enterprises, Inc.*,[102] and the Fourth Circuit's decision in *AT&T Wireless v. City Council of Virginia Beach*,[103] as support for its argument is misplaced. Both cases involve traditional land use functions such as neighborhood aesthetics and set back requirements and do not address a local government's authority to regulate technical matters relating to radio transmission.[104] Moreover, the County's argument that a land use regulation will not be preempted under section 332(c)(7) unless there is a general prohibition of wireless services, or another statutory proscription applies, misses the point. The point is that the Ordinance provisions are not a regulation of the placement, construction, and modification of facilities, but rather a regulation of facilities operation that intrudes impermissibly into an area of exclusive Commission authority. Thus, the Ordinance provisions are preempted for reasons that implicate neither the substantive provisions nor the jurisdictional limitation of section 332(c)(7). For these reasons, we deny the County's Motion to Dismiss.

C. Remediation of Interference.

23. Finally, the County and LSGAC argue that the Commission should defer ruling on Cingular's Petition until after the completion of the 800 MHz interference proceeding.[105] In the 800 MHz proceeding, the Commission is considering new methods and strategies in order to develop long-term measures to alleviate RF interference from commercial systems.[106] The County argues that preemption at

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[100] H. Rep. No. 104-458 at 209 (1996), reprinted in 1996 U.S.C.C.A.N. 124, 223.

[101] *Johnson County,* 199 F.3d at 1191; *see also* VoiceStream Comments at 6-7. The fact that the Commercial Wireless Division in *Johnson County* issued solely an advisory letter, and the matter was ultimately resolved by the court, is not inconsistent with our finding here. The Division issued an advisory letter there in response to an informal request for advice. Nothing in the letter or the court's decision suggests that the Commission could not have issued a binding ruling in response to a formal petition. *See* CWD 1997 Letter.

[102] 173 F.3d 9, 14.

[103] 155 F.3d 423, 428.

[104] *Town of Amherst*, 155 F.3d at 428 (purpose of ordinance was to prevent the development of proposed facilities in areas where they would interfere with the view from any public land, natural scenic vista, historic building or district, or major view corridor); *AT&T Wireless PCS,* 173 F.3d at 14 (city's opposition to conditional use permit was based on preserving neighborhood's character and avoiding aesthetic blight).

[105] *See* County Comments at 9-10; October 8, 2002 LSGAC Letter at 2.

[106] *See 800 MHz NPRM*. Specifically, the Commission asked for comment regarding potential long term measures to reduce or eliminate interference to public safety operations, including, *inter alia,* various means of reconfiguring the 800 MHz band; relocating incumbents to the 900 MHz band or elsewhere;

this time would disrupt ongoing negotiations between zoning authorities and carriers pursuant to that proceeding.[107] The County further suggests that until new rules pursuant to that proceeding are in place, the Ordinance is necessary to ensure continued discussion between the carriers and the County to aid ongoing interference mitigation.[108]

24. We disagree that the pendency of the 800 MHz proceeding is sufficient reason to delay action in the instant proceeding. The Commission's consideration of new ways to alleviate ongoing interference has no bearing on the fact that the County's existing requirements unlawfully infringe on Commission jurisdiction. Moreover, the record includes ample evidence that the Ordinance provisions are in fact impeding service in the County, contrary to Commission policy. For example, Cingular and other carriers recently notified the Commission that the County is refusing to issue permits for new tower sites, as well as use permits for existing sites, because their applications do not contain the non-interference certification.[109] Cingular also claims that, as a direct result of its inability to comply with the Ordinance, it has been unable to modify certain cell sites within Anne Arundel County, causing significant delay in the provision of wireless service.[110] Cingular has advised that it has received correspondence from the County threatening fines and penalties for its failure to obtain a use permit with the required certification for an existing facility for which no application was ever filed.[111] According to another commenter, because changes in modulation rates, bandwidth, power levels and frequencies occur in wireless facilities on a minute-by-minute basis, the County's RFI studies requirement would render the telecommunications facilities on its towers inoperable.[112] In addition, we are concerned that the proliferation of similar but potentially inconsistent local government regulations across the nation could impose substantial costs that would retard the spread of wireless systems.[113]

25. At the same time, the parties do not lack means to address interference issues in the near term. Pending resolution and implementation of the 800 MHz proceeding, the Bureau has publicized a structure for interference mitigation through the *Best Practices Guide,* which was compiled by an outside working group of experts and is designed to provide a short- to mid-term framework for local governments and carriers to address instances of commercial interference with 800 MHz public safety systems.[114] Based on the record, it appears that the technical staffs of the County and the carriers are

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handling licensing and frequency coordination and covering costs of relocated licensees; changing receiver standards; imposing stricter limits on out-of-band emissions; and intensifying the strength of public safety signals.

[107] *See* County Comments at 9-10.

[108] *Id.* In earlier pleadings, the County also argued that a decision would be premature because it was continuing to revise and was not enforcing its Ordinance. *See* August 26, 2002 County Letter at 1-2; October 4, 2002 County Letter at 1-2. However, the County is now enforcing its Ordinance, and is no longer pressing these arguments.

[109] *See* January 28, 2003 Nextel Letter at 1; January 27, 2003 Cingular Letter at 2.

[110] Cingular Petition at 9, n. 33.

[111] *See* Zoning Enforcement Letter.

[112] *See* Pinnacle Comments at 3.

[113] *See* AWS Comments at 10; Sprint Comments at 4.

[114] *See Best Practices Guide PN*. The *Best Practices Guide* sets out a cooperative process and some suggested types of ameliorative actions for parties to identify and alleviate radio interference between public safety and CMRS systems in the 800 MHz band. These include: retuning CMRS channels further away from

currently addressing interference issues as contemplated by the *Best Practices Guide*.[115] For example, Cingular works with the County and coordinates with other carriers to resolve any interference with the County's public safety system caused by Cingular's operations.[116] The record also indicates that Cingular has designated an RF engineering contact to coordinate with the County and to provide the County site data, internal company interference test data, configurations to optimize sites for reduced interference, and operational dates for new sites.[117] Cingular has reported that it regularly monitors for potential interference cases through a national website and that when it learns of a potential case of interference, the company responds to the relevant parties, often before Cingular's involvement with the interference becomes known.[118] As a result of those and other efforts, the CMRS carriers and the County have reduced the 61 dead spots claimed in the County's original filings to 21.[119] The Commission is working expeditiously toward measures in the 800 MHz proceeding that we hope will help alleviate many current interference issues. Nonetheless, in order to assure that interference problems in the County are addressed on a timely basis, we expect the parties to continue to cooperate in their mitigation efforts consistent with the *Best Practices Guide*.

26. While we are encouraged by the progress to date and evidence of ongoing cooperation, we share the County's concern that Cingular, Nextel, and other carriers remain committed partners with the County in ongoing interference mitigation efforts. In particular, we note indications in the record that Cingular in the past has not always cooperated fully in the County's efforts to resolve interference problems with its public safety communications network.[120] Particularly in light of recent events and the nation's heightened concern regarding homeland security, we expect carriers will make every effort to assist local governments addressing public safety interference issues, and we are committed to taking an active role where necessary to assure that such cooperation occurs. Therefore, we direct the County, Cingular and Nextel to report to the Bureau's Commercial Wireless Division in 30 and 90 days after the release of this Order to describe the progress of mitigation efforts in the County. We expect that these reports will show continued concerted efforts to address remaining instances of interference with the County's public safety communications system.

IV. ORDERING CLAUSES

27. Accordingly, IT IS ORDERED that, pursuant to Sections 2(a), 4(i), 301, 302(a), 303(c), 303(d), 303(e), 303(f), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 152(a),

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the public safety operator's channel; modifying CMRS power levels, antenna height and antenna characteristics; assuring proper operation of base station equipment; improving the local signal strength of the public safety communications system; incorporating filters into CMRS transmission equipment; and segregation of public safety and CMRS spectrum assignments. *Best Practices Guide* at 11-12. In the case of new CMRS or public safety systems, the Guide advocates advance planning on the part of both local governments and CMRS operators. *Best Practices Guide* at 13-14.

[115] *See* Cingular September 11, 2002 Letter.

[116] *Id*.

[117] *Id.*

[118] *Id.*

[119] *See* Letter from James Hobson, attorney for the County, to Marlene H. Dortch, FCC Secretary, dated April 15, 2003, at 2.

[120] County Fact Sheet at 2.

154(i), 301, 302(a), 303(c), 303(d), 303(e), 303(f), 303(r), and section 1.2 of the Commission's rules, 47 C.F.R. § 1.2, the Petition filed by CINGULAR WIRELESS LLC on April 23, 2002, is GRANTED.

28. IT IS FURTHER ORDERED that the Motion to Dismiss filed by ANNE ARUNDEL COUNTY, MARYLAND, on June 3, 2002, is DENIED.

29. IT IS FURTHER ORDERED that Anne Arundel County, Maryland, Cingular Wireless LLC, and Nextel Communications Inc. SHALL FILE reports with the Commercial Wireless Division of the Wireless Telecommunications Bureau regarding mitigation efforts in the County 30 and 90 days after release of this order. We encourage the parties to file their reports jointly. Three copies of each report should be addressed to Gary Oshinsky, Commercial Wireless Division, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th St. SW, Washington, D.C. 20554.

30. This action is taken by the Chief, Wireless Telecommunications Bureau, pursuant to authority delegated by Section 0.331 of the Commission's rules. 47 C.F.R. § 0.331.

FEDERAL COMMUNICATIONS COMMISSION

John B. Muleta
Chief,
Wireless Telecommunications Bureau

APPENDIX

LIST OF COMMENTERS ON CINGULAR'S PETITION

Comments

1. ALLTEL Communications, Inc. ("ALLTEL")
2. Anne Arundel County, Maryland ("County")
3. AT&T Wireless Services, Inc. ("AWS")
4. Cellular Telecommunications & Internet Association ("CTIA")
5. Mark F. Hutchins ("Hutchins")
6. National Association for Amateur Radio AKA American Radio Relay League, Inc. ("ARRL")
7. Pinnacle Towers Inc. ("Pinnacle")
8. Sprint Corporation ("Sprint")
9. Telecommunications Industry Association ("TIA")
10. United States Cellular Corporation ("USCC")
11. Verizon Wireless ("Verizon")
12. W. Lee McVey PE
13. Weblink Wireless, Inc. ("WebLink")

REPLY COMMENTS

1. Anne Arundel County Maryland ("County")
2. Cingular Wireless LLC ("Cingular")
3. Rural Cellular Association ("RCA")
4. VoiceStream Wireless Corporation ("VoiceStream")