Consolidated Case Nos. 19-70123, 19-70124, 19-70125, 19-70136, 19-70144, 19-70145, 19-70146, 19-70147, 19-70326, 19-70339, 19-70341, and 19-70344

IN THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

Sprint Corporation,
Petitioner,

City of Bowie, Maryland, et al.,
Intervenors,

vs.

Federal Communications Commission and United States of America,
Respondents.

On Petition for Review of Order of the Federal Communications Commission

PETITIONER MONTGOMERY COUNTY, MARYLAND'S OPENING BRIEF

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Dated: June 10, 2019

CORPORATE DISCLOSURE STATEMENT

Petitioner Montgomery County is a governmental entity and thus Fed. R. App. P. 26.1 does not apply.

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INTRODUCTION

This appeal (No. 19-70147) involves the much publicized rollout of 5G technology in local communities across the United States. In a rush to migrate this country to 5G, the Federal Communications Commission ("FCC" or "Commission") adopted an order that will accelerate the installation of 5G transmitters in public rights-of-way. As thousands of these transmitters will be densely packed into residential areas and public spaces, citizens began to ask their local officials whether these installations will be safe. Municipalities, like Petitioner Montgomery County, looked to the FCC for answers.

Under federal law, state and local governments have no authority to regulate potential health impacts of radiofrequency ("RF") emissions from wireless transmitters provided that those installations comply with federal safety standards. Instead, that responsibility lies solely with the FCC. While the Commission adopted RF exposure standards in 1996, those are now almost 25 years-old and are based on scientific knowledge available at the time. As a result, these standards were designed to protect only against the heating or burning of human tissue. Since then, an extensive amount of research has been conducted into

RF that raises concerns about other serious health effects. Not surprisingly, Montgomery County and others asked the Commission, before speeding the widespread deployment of 5G transmitters, to evaluate recent scientific studies and confirm whether the 1996 RF standards will adequately protect public health and safety.

Regrettably, the FCC refused. At the behest of the wireless providers, the Commission quickly issued the order without any thought given to RF issues. As a result, Montgomery County and other local governments have been unable to fully alleviate their citizens' concerns. While Montgomery County certainly appreciates the technological advantages that 5G may have to offer, it must be assured that its residents will not face any undue health risks. Indeed, as this appeal demonstrates, the FCC had a legal duty, under the National Environmental Policy Act and the Administrative Procedure Act, to reevaluate the RF standards in light of recent research and determine whether they remain protective of human health. Because Montgomery County must completely rely on the Commission to set adequate RF exposure standards, the law requires nothing less.[1]

[1] References to the Excerpts of Record are designated as "MC".

STATEMENT OF JURISDICTION

This Court has jurisdiction under 47 U.S.C. § 402(a) and 28 U.S.C. § 2342(1) to review the final order of the Federal Communications Commission ("FCC") captioned *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, Declaratory Ruling and Third Report and Order, FCC 18-133, WT Docket No. 17-79, WC Docket No. 17-84 (September 27, 2018) ("Small Cell Order" or "Order"). The Order was published in the *Federal Register* on October 15, 2018, 83 Fed. Reg. 51,867. The FCC's claimed bases for the Order are 47 U.S.C. §§ 253, 332(c)(7).

Petitioner Montgomery County timely filed its Petition For Review ("Petition") in the U.S. Court of Appeals for the Fourth Circuit on December 5, 2018. No. 18-2448; Dkt. 2; 28 U.S.C. § 2344. That action was transferred to the United States Court of Appeals for the Tenth Circuit on December 13, 2018 pursuant to a November 2, 2018 order of the Judicial Panel on Multidistrict Litigation. *Id.* at Dkt. 9; 28 U.S.C. § 2112. The action was then transferred to this Court pursuant to a January 10, 2019 order issued by the Tenth Circuit. No. 18-9586; Dkt. 10617934. On March 20, 2019, this Court consolidated

Montgomery County's Petition with petitions filed in the above-captioned matters. No. 19-70147; Dkt. 36.

STATEMENT OF ISSUES

Petitioner Montgomery County and others requested during the underlying proceedings that the Federal Communications Commission ("FCC") review its 1996 radiofrequency ("RF") safety standards and confirm, before issuing the Order, whether they remain protective of human health given what will be the accelerated deployment under the Order of numerous 5G facilities in local communities across the country. This case raises the following issues:

1. Did the FCC violate the National Environmental Policy Act ("NEPA") when it failed to either: (i) explain why that statute does not apply to the Order; or (ii) conduct an environmental analysis of the RF standards and potential 5G health risks?

2. Did the FCC violate the Administrative Procedure Act when it failed to either: (i) explain why it did not consider whether the 1996 RF standards protect against potential 5G health risks; or (ii) address relevant public health and safety issues when adopting the Order?

STATEMENT OF THE CASE

I. Background

A. Radiofrequency Emissions and 5G Technology

Wireless services are provided through electromagnetic or radiofrequency ("RF") energy.[2] MC216. RF emissions consist of radio and microwaves that propagate through space as waves or particles.[3] To send voice, data, or video content, this energy or radiation is generated by a fixed station antenna (attached to a tower, building, or pole) that radiates away from the transmitter and is received by an antenna in a cell phone or other wireless device.[4]

The FCC and wireless providers are looking to transition to the next generation of wireless services, known as 5G. While there will be some overlap in RF ranges emitted by current wireless technologies (*i.e.*, 2G, 3G, and 4G) and what are called 5G "small cell" transmitters or facilities, 5G will emit frequencies not seen in today's wireless

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[2] FCC, OET Bulletin 56, at 1 (August 1999) ("OET 56"), http://tinyurl.com/y26mog56. OET Bulletin 56, coupled with OET Bulletin 65 (referenced below), provide FCC guidance on implementing and complying with the FCC's 1996 RF standards.

[3] *Id.*

[4] *Id.*

environment. MC226; MC216. Existing transmitters emit frequencies ranging from 300 KHz to 100 GHz[5], but 5G facilities will potentially emit high-frequency millimeter waves ("MMW") falling between 30-300 GHz. MC216; MC218; *see* MC229; MC234.

B. The FCC's 1996 RF Standards – Focusing Solely On Thermal-Related Health Risks

In 1996, over twenty years before 5G became commercially viable, the FCC adopted the current RF standards that limit radiation emitted from wireless transmitters.[6] These standards were adopted pursuant to, *inter alia*, the Commission's duties under the National Environmental Policy Act ("NEPA") to evaluate the potential impacts of human exposures to RF emissions.[7] Congress had directed the FCC in the Telecommunications Act of 1996 ("TCA") to complete an on-going proceeding to prescribe safe RF exposure levels.[8]

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[5] FCC, *In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, Report and Order, 1996 FCC LEXIS 4081, at *28 (Aug. 1, 1996).

[6] *Id.*; *see* 47 C.F.R. § 1.1310.

[7] 1996 FCC LEXIS 4081, at *4, *147.

[8] Pub. L. No. 104-104, 110 Stat. 56 (1996).

To avoid an emerging patchwork of state and local laws governing RF emissions, Congress preempted local communities from regulating the siting of wireless transmitters based on RF concerns *if* those facilities comply with the FCC's RF standards.[9] Thus, municipalities necessarily rely on the FCC to ensure that the RF standards provide "adequate safeguards [for] the public health and safety."[10]

However, the FCC designed the 1996 exposure limits to protect against only one type of RF-related health risk. It was well known at the time that RF energy could result in excessive heating of biological tissue.[11] *See generally* MC242. For instance, RF radiation is used to heat food in insulated microwave ovens.[12] These so-called "thermal" effects stem from "the body's inability to cope with or dissipate the

[9] 47 U.S.C. § 332(c)(7)(B)(iv); 47 C.F.R. § 1.1307(e).

[10] Telecommunications Act of 1996, H. Rep. No. 104-204, at 94 (1995), *as reprinted in* 1996 U.S.C.C.A.N. 10, 61. The Senate bill did not have a comparable provision relating to RF. H. Rep. No. 104-204, at 207, *as reprinted in* 1996 U.S.C.C.A.N. at 221.

[11] FCC, *In the Matter of Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields*, NPRM, 2003 FCC LEXIS 3547, at *1 (June 26, 2003).

[12] OET 56, *supra* note 2, at 4.

excessive heat that could be generated."[13] But the Commission did not account for potential "non-thermal" impacts, such as cancer, neurological impacts, and immune system deficiencies.[14] *See* MC215; MC276; MC229; MC284 (all noting FCC RF standards are only based on thermal effects). The FCC concluded that, based on evidence available in 1996, studies on such impacts were "ambiguous and unproven" and "[f]urther research [was] needed" to determine whether there are additional health concerns.[15]

C. The New 5G Wireless Environment – Moving From Wireless Towers To Small Cell Poles

The 1996 standards were also finalized at a time when "[t]ypical heights for free-standing [wireless] base station towers or structures [were] 50-200 feet."[16] RF signals are usually emitted in a beam directed at the horizon and contained in a relatively narrow vertical plane.[17] Further, radiation from wireless antennas placed on top of these towers

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[13] *Id.* at 6-7.

[14] *Id.* at 8.

[15] OET 56, *supra* note 2, at 8.

[16] *Id.* at 20.

[17] *Id.* at 21-22.

"decreases rapidly . . . as one moves away from the antenna" and thus human exposures at ground level will be much less than those "encountered if one were very close to the antenna and in its main transmitted beam."[18] Indeed, the FCC has emphasized that human "accessibility" (*i.e.*, proximity) to wireless antennas is a key factor in determining compliance with the exposure limits.[19] In fact, the FCC assumes that residential and public areas, which are not otherwise shielded from emissions, would be subject to continuous, unrestricted RF exposures if radiation from today's macro cell towers did not largely attenuate before reaching ground level.[20]

The new 5G environment envisioned under the Order will look much different. MC002 ("From a regulatory perspective, [small cells] raise different issues than the construction of large, 200-foot towers that marked the 3G and 4G deployments of the past."). In contrast to

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[18] *Id.* at 21 (stating an "individual would essentially have to remain in the main transmitting beam (at the height of the antenna) and within a few feet from the antenna" to be exposed to levels close to the FCC's limits); *see* 1996 FCC LEXIS 4081, at *85-86 (noting exposures from tower-mounted antennas at ground level are below RF limits).

[19] FCC, OET Bulletin 65, at 53 (August 1997) ("OET 65"), http://tinyurl.com/y6r5w64y.

[20] 1996 FCC LEXIS 4081, at *39; *see* OET 65, *supra* note 19, at 14.

the longer wavelengths associated with older wireless technologies, which allow towers to be spaced miles apart, 5G will rely on shorter millimeter wavelengths that travel only short distances, thus requiring that small cell poles be placed close together (*e.g.*, every 250 meters). MC218; *see* MC326 (poles every 100 feet with antennas 30 feet or less above ground).

For instance, under the FCC's current regulations, small cell poles can be no higher than 50-feet, with each pole potentially containing multiple antennas. MC004 (*citing* 47 C.F.R. § 1.1312(e)(2)). Moreover, 5G emissions will be within the direct-line-of-sight of residences and commercial spaces, including bedrooms and offices, as poles are placed at street level in public rights-of-way. MC329; MC300; MC301; MC303; MC306; MC308; MC361. Such densification means that homes and businesses will be subjected to simultaneous 5G emissions from multiple poles and antennas that are positioned directly in the front or back of individual properties.

And the number and concentration of 5G facilities will be considerable. It is estimated that carriers will invest $275 billion in 5G over the next decade. MC002. Small cell poles will be installed "at a

faster pace and at a far greater density of deployment than before." *Id.* For example, Verizon's 5G plans envision 10 to 100 times as many antenna locations than currently exist. *Id.* at MC025. AT&T expects providers to roll out "hundreds of thousands of wireless facilities in the next few years alone," equal to or more than have been installed in the last few decades. *Id.* Sprint plans to build at least 40,000 small cell facilities in the next few years. *Id.* Accenture reports that in the next three to four years, 300,000 small cells will be in operation, double the number of macro cells "built over the last 30 years." *Id.* All of this is particularly relevant to neighborhoods and public areas which will host these dense networks of small cells. MC226; MC217-MC218.

D. Current Research On RF Health Effects – Raising Concerns About Non-Thermal Health Risks

When promulgating the 1996 standards, the FCC realized that they would not be the final word on safe exposure levels. The FCC noted "that research and analysis relating to RF safety and health is ongoing, and we expect changes in recommended exposure limits will occur in the future as knowledge increases in this field."[21] Later, when

[21] 1996 FCC LEXIS 4081, at *3; *see* OET 56, *supra* note 2, at 12.

opening a 2013 docket to reconsider the RF standards, the FCC likewise recognized "additional progress in research subsequent to adoption of our existing exposure limits."[22] The FCC further stated:

> [A] great deal of scientific research has been completed in recent years and new research is currently underway, warranting a comprehensive examination of this and any other relevant information. Moreover, ubiquity of device adoption as well as advancements in technology and developments in the international standards arena since establishing our present policies in 1996 warrant an inquiry to gather information to determine whether our general regulations and policies limiting human exposure to radiofrequency (RF) radiation are still appropriately drawn.[23]

In fact, comments submitted in the Order's administrative record point to numerous studies conducted since 1996, with many completed in the last decade, identifying various non-thermal impacts of RF radiation. For example, the BioInitiative 2012 report (including updates through 2017) was prepared by 29 medical, scientific, and academic experts from 10 countries and reviewed over 1,800 studies

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[22] FCC, *In the Matter of Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies*, First Report and Order; Notice of Proposed Rulemaking and Notice of Inquiry, 2013 FCC LEXIS 1257, at *8-9 (Mar. 27, 2013) ("2013 NOI").

[23] *Id.* at *250.

focusing on adverse health impacts, including those from cell towers.[24] *See* MC230; MC317; MC243-MC244 (all citing 2012 report).

These and other studies examine a number of RF-related risks, such as carcinogenicity, DNA damage and genotoxicity, reproductive impacts (*e.g.*, low sperm counts), and neurologic effects (*e.g.*, behavioral issues in children). MC235-MC239; MC327-MC328; MC231-MC233; MC244-MC252; MC265-MC274; MC217-MC225. They also identify adverse physiological mechanisms that could be triggered by RF exposures and cause non-thermal effects, such as stimulating cell proliferation, altering cell membrane function, and modulating synthesis of proteins involved in inflammatory and immunologic processes. MC217; MC235.[25]

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[24] *BioInitiative 2012 – A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation* (2017), https://tinyurl.com/y5osqo6x.

[25] Comments submitted by Montgomery County in the 2013 NOI docket are also referenced in the Order's administrative record in a submission made by the Smart Communities and Special Districts Coalition ("Smart Communities Coalition"). MC313-MC314. Montgomery County's comments, in turn, included an extensive bibliography of studies that identify various risks associated with RF exposures from wireless installations, including DNA damage, cancer, male infertility, neurobehavioral impacts, and other biological effects (*e.g.*, headaches, dizziness, sleep disturbances). *See* Supplemental Comments of

Recent studies in the administrative record also raise particular concerns regarding 5G small cells. They examine MMWs and biological effects at non-thermal levels, including eye and skin damage, cell and membrane impacts, and altered gene expression. MC218-MC219; MC235; MC226-MC227. Further, they highlight the cumulative effects of increased daily exposures from numerous wireless sources that will be made possible by the provision of 5G services. MC232 ("Cumulative effects of RF exposures from multiple wireless devices and environmental exposures [*i.e.*, cell towers] are not addressed at all; nor measured or tested under current or proposed FCC rules."); MC226. Studies also discuss the susceptibility of infants and children who, in some cases, will be living only yards away from 5G arrays. MC318 ("Children absorb more [microwaves] than adults because their brain tissues are more absorbent, their skulls are thinner and their relative size is smaller."); MC215 ("Research also shows children absorb more

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Montgomery County, Maryland, ET Docket Nos. 13-84, 03-137 (March 8, 2017), https://tinyurl.com/y5hksww3.

microwave radiation per body weight than an adult, however, standards were developed for adult bodies.").[26]

In response to this collective body of research, the scientific and academic communities recently issued statements warning of RF health risks. In 2015, over 200 scientists from 42 countries, including the United States, sent a letter to the United Nations and World Health Organization ("WHO") stating that "[b]ased upon peer-reviewed, published research, we have serious concerns regarding the ubiquitous and increasing exposure to EMF generated by electric and wireless devices," including cell towers. Listed RF effects include "cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, [and] neurological disorders."[27] *See* MC317; MC244; MC226; MC329 (all citing 2015 letter).

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[26] *BioInitiative 2012*, *supra* note 24 (citing risks to sensitive populations).

[27] EMFscientist.org, *International Appeal: Scientists call for Protection from Non-ionizing Electromagnetic Field Exposure* (May 11, 2015), http://tinyurl.com/y524pb2w.

Moreover, in 2017, several hundred experts from the United States and around the world sent a letter to the European Union requesting a moratorium on 5G technology until the "potential hazards for human health and the environment have been fully investigated by scientists independent from industry."[28] They note that 5G will contribute to cumulative RF exposures – *i.e.*, an "increase[d] exposure to radiofrequency electromagnetic fields (RF-EMF) on top of the 2G, 3G, 4G, Wi-Fi, etc. for telecommunications already in place." *See* MC226 (citing 2017 letter).

Two significant findings made by U.S. and international health organizations also demonstrate that RF radiation may pose a cancer risk. In several studies conducted over a 10-year period at a cost of $25 million, the National Toxicology Program ("NTP"), which is part of the U.S. Department of Health and Human Services, found increased rates of cancer in male rats exposed to RF from cell phones. MC316-MC317; MC230-MC231; MC327; MC215 (all citing NTP study).

[28] *Scientists and doctors warn of potential serious health effects of 5G* (September 2017), http://tinyurl.com/y9kp3y43.

NTP's work followed a 2011 determination by the WHO's International Agency for Research on Cancer ("IARC") that RF radiation falls in "Group 2B: Possibly carcinogenic to humans" based on an analysis of then-current research.[29] IARC found "limited evidence in humans and experimental animals" showing increased rates of several cancers following exposure to RF from wireless phones.[30] *See* MC318; MC242-MC243; MC215; MC235 (all citing IARC study). For perspective, the Group 2B category includes toxic materials like DDT, lead, welding fumes, and carbon tetrachloride. MC244.

Based on the foregoing, scientists and academics warn that the FCC's current RF standards, which are limited to addressing thermal effects, may not be protective of human health. MC230 ("The FCC ignores studies establishing human health harm at currently permissible exposure levels."); MC232 (citing *BioInitiative 2012*, which in turn states FCC standards "do not sufficiently protect the public health against chronic exposure from very low-intensity exposures.")[31];

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[29] The Lancet, *Carcinogenicity of radiofrequency electromagnetic fields* (July 2011), http://tinyurl.com/yxo8ygwx.

[30] *Id.*

[31] *BioInitiative 2012*, *supra* note 24.

MC316 (FCC guidelines "are outdated and not based on current science."); MC221 ("Public health regulations need to be updated to match appropriate independent science with the adoption of biologically based exposure standards prior to further deployment of 4G or 5G technology."); MC325 ("[T]here is sufficient research showing adverse environmental and human health effects of radiation from wireless technology at levels far below the current FCC RF limits to justify the FCC placing a moratorium on the rollout of new wireless infrastructure."); MC215 ("Many of these studies demonstrate effects well below the heat threshold of current safety standards."). As a result, they recommend further research be conducted on non-thermal effects before 5G is widely available. MC229; MC232; MC235.

II. FCC Proceedings

A. The 2013 Notice of Inquiry – Initiating A Review Of The 1996 RF Standards

Coinciding with growing concerns over the RF standards, the FCC opened a docket over a half-decade ago to revisit the exposure limits. In the 2013 NOI, the Commission requested "comment[s] to determine

whether our RF exposure limits and policies need to be reassessed."[32]

The FCC further stated:

> Periodic review of the government's rules and regulations to ensure they have kept pace with current knowledge and changing needs is an important characteristic of good government, and we here will advance the process of providing a comprehensive review and modification, where appropriate, of this Commission's various rules pertaining to the implementation of the National Environmental Policy Act (NEPA) requirements for environmental reviews, specifically those reviews related to health and safety of radiofrequency (RF) emissions from radio transmitters. Our actions herein are intended to ensure that our measures are compliant with our environmental responsibilities and requirements and that the public is appropriately protected from any potential adverse effects from RF exposure as provided by our rules, while avoiding any unnecessary burden in complying with these rules.[33]

In addition, the FCC recognized that, separate and apart from NEPA, it has a public safety mandate to ensure that the RF standards adequately protect citizens. The Commission noted that its "authority to adopt and enforce RF exposure limits beyond the prospective limitations of NEPA is well established" and specifically cited various statutory bases for developing and updating the RF standards.[34]

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[32] 2013 FCC LEXIS 1257, at *2.

[33] *Id.* at *1.

[34] *Id.* at *117 n.176.

According to the FCC, these include: (i) Section 704(b) of the TCA (directing the FCC to promulgate the 1996 standards)[35]; (ii) the TCA's legislative history (*e.g.*, "identifying adequate safeguards for the public health and safety as part of a framework of uniform, nationwide RF regulations")[36]; (iii) 47 U.S.C. § 151 (authorizing the FCC to "promote[] safety of life and property through the use of wire and radio communications"); and (iv) 47 U.S.C. §§ 332(a), 332(c)(7)(B)(iv).[37]

Accordingly, while the FCC has an obligation under the TCA to promote a "rapid, efficient, Nation-wide" telecommunications service, 47 U.S.C. § 151, it must reconcile that goal with the need to protect public health and safety from RF-related risks. As the 2013 NOI states, the Commission has a "responsibility to provide a proper balance between the need to protect the public and workers from exposure to potentially

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[35] *Id.*

[36] *Id.* (*quoting* H. Rep. No. 104-204, at 94, *as reprinted in* 1996 U.S.C.C.A.N. at 61 (internal quotations omitted).

[37] *Id.* (*citing Farina v. Nokia, Inc.*, 625 F.3d 97, 128, 130 (3d Cir. 2010) ("But although the FCC's RF regulations were triggered by the Commission's NEPA obligations, health and safety considerations were already within the FCC's mandate . . . and all RF regulations were promulgated under the rulemaking authority granted by the FCC."); ("Protecting public safety is clearly within the mandate of the FCC.").

harmful RF electromagnetic fields and the requirement that industry be allowed to provide telecommunications services to the public in the most efficient and practical manner possible."[38] This is also consistent with previous statements made by the Commission when reconsidering (and affirming) the 1996 RF standards in a 1997 proceeding.[39] Indeed, in addressing its preemption powers under 47 U.S.C. § 332 (c)(7)(B)(iv), the FCC stated that "we seek to balance the legitimate role of state and local authorities in zoning and land use matters with the statutory goal

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[38] 2013 FCC LEXIS 1257, at *298 (internal quotations omitted); *see also id.* at *117 n.176 (*quoting Farina*, 625 F.3d at 125) ("In order to satisfy both its mandates to regulate the safety concerns of RF emissions and to ensure the creation of an efficient and uniform nationwide network, the FCC was required to weigh those considerations and establish a set of standards that limit RF emissions enough to protect the public and workers while, at the same time, leave RF levels high enough to enable cell phone companies to provide quality nationwide service in a cost-effective manner.").

[39] FCC, *In the Matter of Procedures for Reviewing Requests for Relief from State and Local Regulations Pursuant to Section 332(c)(7)(B)(v)*, Second Memorandum Opinion and Order and Notice of Proposed Rulemaking, 1997 FCC LEXIS 4605, at *25-26 (Oct. 9, 1997) ("We continue to believe that these RF exposure limits provide a proper balance between the need to protect the public and workers from exposure to excessive RF electromagnetic fields and the need to allow communications services to readily address growing marketplace demands."); *see id.* at *2, *5.

of promoting fair competition in the provision of personal wireless services without compromising public health and safety."[40]

As commenters noted in the Order's administrative record, over 900 submissions have been submitted in the 2013 NOI docket, with many focusing on non-thermal risks posed by RF radiation. MC298. The FCC's review has stalled, however, and therefore it has not considered whether the installation and operation of 5G small cells pose such health risks or whether the current RF standards remain protective of human health.[41]

B. The 2018 Small Cell Order – The FCC Accelerates 5G Deployments Without Completing The 2013 Review

The Order's primary purpose is to "remove regulatory barriers that would unlawfully inhibit the deployment of infrastructure necessary to support these new services." MC002. According to the FCC, the statutory provisions enforced in this Order – 47 U.S.C. § 253 and 47 U.S.C. § 332(c)(7) – guard against steps taken by state or local governments that "prohibit or have the effect of prohibiting" the

[40] *Id.* at *119.

[41] *Infra* pages 24-26.

"provision of personal wireless services" or the "ability of any entity to provide any interstate or intrastate telecommunications service." As a practical matter, the Order will allow carriers to "build out small cells at a faster pace and at a far greater density . . . than before." MC002. In other words, municipalities will see more 5G small cells, in a shorter amount of time, and in greater amounts, combined with the resulting emissions of RF radiation from the provision of 5G services.

In the Order, the FCC also maintains that it is exercising its "broad" authority to "issue interpretations of the statutory language and to adopt implementing regulations that clarify and specify the scope and effect of the Act." MC008; *see id.* at MC0002; MC013; MC026; MC052. In fact, the Commission prescribes in great detail what municipalities can and cannot do when it comes to 5G small cells in their rights-of-way. Among the many FCC restrictions imposed, the Order: (i) adopts a specific interpretation of the "materially inhibit" standard under Sections 253 and 332 (*id.* at MC013); (ii) limits local fees to those that are a "reasonable approximation of the state or local government's costs" and establishes certain fee amounts that are presumptively allowed (*id.* at MC026; MC042); (iii) restricts the extent

to which municipalities can regulate small cells based on aesthetic concerns, such as limiting requirements for undergrounding infrastructure or setting minimum spacing between 5G poles (*id.* at MC046); and (iv) prohibits municipalities from refusing batched applications for multiple 5G sites (*id.* at MC061).

C. Comments By Montgomery County And Others Requesting That The FCC Complete The 2013 Review Before Issuing The Order

Because of the FCC's efforts to hasten the deployment of 5G facilities in local rights-of-way, Montgomery County raised concerns about the current RF standards and their ability to protect local citizens. Specifically, Montgomery County officials met with, *inter alia*, FCC Chairman Ajit Pai, several FCC Commissioners, and agency staff from the Wireless Telecommunications Bureau, and requested that the FCC delay rulemakings aimed at speeding small cell rollouts until the 2013 RF proceedings were completed. MC330-MC341.

Likewise, in follow-up written comments, Montgomery County stated that the "FCC should complete the 2013 RF proceeding . . . before taking further action to preempt local zoning." *Id.* Montgomery County noted that "residents are concerned about the health effects of having

more antennas in their neighborhoods and closer to bedrooms" and concluded that "the Commission's 20-year old standards undermine public confidence" that they are adequately protective of human health. *Id.* Moreover, as a member of the Smart Communities Coalition,[42] Montgomery County again requested that the FCC complete the 2013 RF proceeding "before preempting local authority any further." MC314. In quoting comments previously made by Montgomery County in the 2013 NOI docket, the Smart Communities Coalition observed that "recent studies describing the impact of small cell deployments on RF exposure . . . are simply not reflected in existing [RF] rules." *Id.*[43]

In addition, numerous other local governments and associations, scientists, and individual citizens requested that the FCC complete the 2013 proceedings before expediting the rollout of 5G technology and otherwise expressed concerns about the substantially out-of-date RF

[42] Smart Communities consists of "localities, special districts and local government associations that collectively represent over 31 million residents in 11 states and the District of Columbia." MC312.

[43] *See id.* ("Smart Communities believes it will be much easier to gain public acceptance and support for deployment of wireless facilities . . . if the Commission acts to complete its 2013 RF proceeding."); *see also supra* note 25.

standards. *See, e.g.,* MC298 (researchers stating that "[t]he FCC has an obligation to conclude its open proceeding on health effects . . . before opening the floodgates to industry to massively increase the number of wireless facilities across the US."); MC361 (coalition of local governments urging that "[t]he Commission must update its RF emissions standards for the new millennium and address their applicability to modern and next-generation networks."); MC365 (local government association stressing "need for an updated RF study on small cell deployments"); MC371 (city "urg[ing] the Commission to complete its [2013] study and modernize its standards"); MC316 (scientists stating that the "FCC has not completed [the 2013] proceedings . . . and has not updated its RFR safety guidelines since 1996"); MC276 (researcher stating "[c]urrent safety standards . . . are outdated and inadequate to protect public health. . . . It is not clear what the safety standards will be for 5G technology."); *see also* MC014 n.72 (citing individual commenters expressing health concerns regarding RF emissions).

In its Order, the FCC responds to these comments with a single footnote. MC014 n.72. The Commission states that "[w]e disagree"

with concerns raised about RF emissions from 5G small cell facilities and that "nothing in this Declaratory Ruling changes the applicability of the Commission's existing RF emissions exposure rules." *Id.* The FCC then simply lists various statutory and other authorities allowing the Commission to establish safe RF exposure limits. *Id.* There is no discussion, however, regarding comments addressing potential non-thermal RF effects or completing the 2013 review. In fact, the FCC provides no explanation as to why it was not required under NEPA or other authorities to consider RF issues in this Order.

SUMMARY OF ARGUMENT

1. This appeal seeks to enforce the Federal Communications Commission's ("FCC" or "Commission") duty to ensure that new wireless technologies – and in particular, 5G transmitters that will soon inundate local communities – do not pose an undue health risk to the general public. Under the Telecommunications Act of 1996 ("TCA"), local governments, like Petitioner Montgomery County, have no authority to regulate the location of 5G transmitters in their rights-of-way based on concerns related to radiofrequency ("RF") emissions if

providers comply with federal safety standards.[44] Rather, it is the sole obligation of the FCC to adopt and update these standards. In short, municipalities completely rely on the Commission when it comes to establishing safe RF exposures.

2. Of particular concern, the FCC's Order is designed to speed-up the densification of 5G transmitters in residential neighborhoods and other public spaces. It does so by eliminating perceived regulatory barriers used by local governments that slow down the deployment of wireless services. Thousands of these transmitters will now be attached to poles that are spaced approximately one-hundred feet apart along streets, sidewalks, and alleyways. As such, RF emissions will be in the direct-line-of-sight of bedrooms, offices, and retail establishments. This new 5G environment will stand in stark contrast to the present day, where macro towers can reach 200 feet or more. These towers are often separated by several miles and emit RF from 3G and 4G antennas that largely attenuates before reaching citizens on the ground.

3. In removing the authority of local governments to regulate RF exposures, Congress also directed the Commission in the TCA to

[44] 47 U.S.C. § 332(c)(7)(B)(iv).

promulgate RF standards that are protective of human health. The FCC did so in 1996. However, those standards, which are still in place today, only addressed what are known as "thermal" effects – *i.e.*, the excessive heating of human tissue. They do not account for other potential biological risks called "non-thermal" impacts – *i.e.*, cancer, neurological effects, and reproductive impacts. In fact, over the past two decades, numerous studies indicate that RF emissions, including those from 5G installations, may pose serious health risks to citizens living and working in close proximity to these transmitters.

4. In 2013, the FCC issued a Notice of Inquiry ("NOI") and opened a docket to receive public comments regarding the need to revisit the 1996 RF standards and, if warranted, update the exposure limits based on recent research. Indeed, in the 2013 NOI and elsewhere (including the Order), the FCC recognized that it has a mandate under the National Environmental Policy Act ("NEPA") and/or other statutory authorities to establish and maintain RF standards that protect human health. And when promoting wireless technologies, the Commission also acknowledged that it must balance the need to protect public

health and safety. Unfortunately, the 2013 proceedings have stalled just as the FCC is accelerating 5G deployments.

5. To ensure that their citizens are adequately protected, Montgomery County and other municipalities asked the FCC to complete the 2013 review before issuing the Order. Montgomery County residents want to have full confidence in the safety of 5G technology. The Commission, however, never specifically addressed these comments, and only stated in conclusory fashion that "we disagree" with submissions raising RF concerns. The FCC then issued the Order without completing the 2013 proceedings.

6. In doing so, the FCC violated the National Environmental Policy Act ("NEPA") because it did not explain why the statute is inapplicable here or, in the alternative, conduct an environmental assessment to confirm whether the current RF standards are fully protective of human health. In fact, the Order is subject to NEPA as it constitutes a "major federal action" that may "significantly affect[] the quality of the human environment." Indeed, the Order will result in more 5G transmitters being installed in a shorter period of time in Montgomery County and elsewhere. As such, the FCC was obligated,

before issuing the Order, to either demonstrate that it is exempted from NEPA compliance or complete the NEPA review begun over a half-decade ago under the 2013 NOI.

7. The Commission also violated the Administrative Procedure Act ("APA") given that it failed to consider potential adverse health effects from 5G RF emissions when it adopted the Order. Under the APA, agencies must consider all relevant factors and explain its decision. The FCC concedes that it has a duty to update and maintain the RF standards based on new scientific research, and that it must balance its push for 5G deployments with the need to protect public health and safety. Nowhere in the Order, however, does the Commission consider these issues or articulate why it believes they were irrelevant.

STANDARD OF REVIEW

Where a Federal Communications Commission ("FCC") order is challenged under the Administrative Procedure Act ("APA"), this Court conducts its review on the administrative record. 5 U.S.C. § 706; 47 U.S.C. § 402(g). Specifically, courts ask whether the FCC's action is "arbitrary, capricious, an abuse of discretion, or otherwise not in

accordance with the law." 5 U.S.C. § 706(2)(A); *Info. Providers' Coal. for Defense of First Amendment v. FCC*, 928 F.2d 866, 869 (9th Cir. 1991).

Moreover, as the National Environmental Policy Act ("NEPA") does not provide a private cause of action, judicial review under that statute is also generally subject to the APA. *Anderson v. Evans*, 371 F.3d 475, 486 (9th Cir. 2002). However, where an agency does not apply NEPA at all during the rulemaking, as is the case here, this Court applies a less deferential "reasonableness" standard. *High Sierra Hikers Ass'n v. Blackwell*, 390 F.3d 630, 640 (9th Cir. 2004); *Northcoast Envtl. Ctr. v. Glickman*, 136 F.3d 660, 667 (9th Cir. 1998). Under this approach, the a court only defers to the agency's decision if it is "fully informed and well considered." *High Sierra Hikers Ass'n*, 390 F.3d at 640 (citation and internal quotations omitted).

Finally, under 47 U.S.C. § 402(a) and 28 U.S.C. § 2342, this Court has jurisdiction to enjoin, set aside, annul, suspend, or determine the validity of the Order. *See also* 5 U.S.C. § 706(2) (courts shall "hold unlawful and set aside agency action" that violates the APA).

ARGUMENT

The Federal Communications Commission ("FCC" or "Commission") violated the National Environmental Policy Act ("NEPA") and the Administrative Procedure Act ("APA") when adopting the Order because it did not explain why it ignored potential public health and safety issues related to 5G radiofrequency ("RF") emissions and failed to confirm whether the current FCC RF standards still protect citizens from such exposures.

I. The FCC Failed To Comply With NEPA When It Ignored Comments Requesting That The Commission Complete The 2013 RF Proceeding And Did Not Otherwise Conduct An Environmental Review

A. NEPA Ensures That Environmental Impacts Are Considered Before A Final Decision Is Made

Congress recognized under NEPA the "profound influences" of "new and expanding technological advances" and declared a "policy of the federal government" to "assure for all Americans [a] safe [and] healthful" environment. 42 U.S.C. §§ 4321, 4331. In particular, for "major Federal actions significantly affecting the quality of the human environment," the federal agency must prepare a "detailed statement" on the "environmental impact of the proposed action." 42 U.S.C. § 4332.

While NEPA does not impose any substantive environmental mandates, it does require that agencies follow certain procedures for assessing environmental impacts of their decisions. *Am. Bird Conservancy, Inc. v. FCC*, 516 F.3d 1027, 1032 (D.C. Cir. 2008). These include preparing an Environmental Assessment ("EA"), or if necessary a more comprehensive Environmental Impact Statement ("EIS"), assuming the agency action has not been categorically excluded from NEPA because the activity has been found not to have a significant impact. *Id.; see also Sierra Club v. Bosworth*, 510 F.3d 1016, 1026-27 (9th Cir. 2007); 40 C.F.R. §§ 1508.9, .11. If an EA is prepared, and no significant impact is found, the agency issues a Finding of No Significant Impact ("FONSI"). *Bosworth*, 510 F.3d at 1018.

Under the Council on Environmental Quality's ("CEQ") regulations implementing NEPA, an agency must "insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. . . . Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." 40 C.F.R. § 1500.1(b). *See* 40 C.F.R. § 1501.1(a) ("Integrating the NEPA process into early planning to

insure appropriate consideration of NEPA's policies and to eliminate delay."); 40 C.F.R. § 1501.1(d) ("Identifying at an early stage the significant environmental issues deserving of study.").

As the Supreme Court has stated, this "rule of reason" ensures "that agencies determine whether and to what extent to prepare an EIS based on the usefulness of any new potential information to the decision making process." *DOT v. Public Citizen*, 541 U.S. 752, 767 (2004). In other words, "NEPA emphasizes the importance of coherent and comprehensive up-front environmental analysis to ensure informed decision making to the end that the agency will not act on incomplete information, only to regret its decision after it is too late to correct." *Ctr. for Biological Diversity v. United States Forest Serv.*, 349 F.3d 1157, 1166 (9th Cir. 2003) (citation and internal quotations omitted); *see also Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 733 (9th Cir. 2001) (environmental analysis "required *before* a decision that may have a significant adverse impact on the environment is made") (internal emphasis in original). The FCC must comply with NEPA and its regulations "to the fullest extent possible." 42 U.S.C. § 4332; *Ctr. for Biological Diversity*, 349 F.3d at 1166.

B. The FCC Did Not Satisfy Its Obligation To Explain Why NEPA Is Inapplicable To The Order

Having not applied NEPA in this case, the FCC completely failed to explain how the Order is somehow exempt. "When an agency decides to proceed with an action in the absence of an EA or EIS, the agency must adequately explain its decision." *Bosworth*, 510 F.3d at 1026 (*quoting Alaska Ctr. for Env't v. United States Forest Serv.*, 189 F.3d 851, 859 (9th Cir. 1999). It is not enough for an agency to merely conclude that "an activity it wishes to pursue will have an insignificant effect on the environment." *Shearwater v. Ashe*, 2015 U.S. Dist. LEXIS 106277, at *60 (N.D. Cal. Aug. 11, 2015) (*quoting Alaska Ctr. for Env't*, 189 F.3d at 859) (citation omitted). Rather, the agency "must supply a convincing statement of reasons why potential effects are insignificant," *see Steamboaters v. Fed. Energy Regulatory Comm'n*, 759 F.2d 1382, 1393 (9th Cir. 1985), and consider all relevant factors in doing so, *see, e.g.*, *Alaska Ctr. for Env't*, 189 F.3d at 859.

Here, in response to numerous comments submitted by Montgomery County and others urging the FCC to complete its 2013 NEPA review of the RF standards before finalizing the Order, and to

otherwise confirm that they protect against all health risks, the FCC offered a *single sentence* (and buried it in a footnote, no less):

> We disagree with commenters who oppose the Declaratory Ruling on the basis of concerns regarding RF emissions.

MC014 n.72.

Indeed, nowhere does the FCC even feign an attempt at explaining why the Order is not a "major federal action" or why it does not "significantly" affect the quality of the human environment. *See* 42 U.S.C. § 4332. The Commission also never addresses, even in cursory fashion, the substantial body of evidence in the administrative record discussing potential non-thermal health risks of RF radiation, including MMWs. Instead, the FCC simply states that 5G facilities will "remain subject to the Commission's rules governing" RF exposures, thereby assuming, without any accompanying discussion or analysis, that the 1996 standards are still protective of human health. MC014.

The FCC's terse response, moreover, is particularly disturbing given that Montgomery County and others are prohibited under the TCA from taking any actions regarding RF. *See* 47 U.S.C. §332(c)(7)(B)(iv). As the FCC has stated repeatedly, only it has the authority under NEPA and other statutory provisions to set and

maintain safe RF exposure levels. MC014 n.72.[45] As such, where the Commission adopts a rule that removes perceived barriers to the deployment of 5G antennas outside homes and local businesses, thereby fundamentally changing the environment in which carriers will provide 5G services and citizens will be exposed to RF, it must offer some rationale for totally ignoring NEPA's obligations. Montgomery County is not required to take the FCC's assumptions on mere faith.

C. The Order Constitutes A "Major Federal Action Significantly Affecting The Quality Of The Human Environment"

Even if the FCC had proffered some type of explanation, it would have nevertheless been unable to avoid NEPA because, based on the record, it is clear that the statute applies to this Order.

1. "Major Federal Action"

To begin, the FCC's Order *itself* constitutes a "major federal action." The CEQ defines the term to include adoption of "new or revised agency rules, regulations, plans, policies, or procedures." 40 C.F.R. § 1508.18(a). *See Sherwood v. TVA*, 590 Fed. Appx. 451, 457 (6th Cir. 2014); *Citizens for Better Forestry v. United States Dep't of Agric.*,

[45] *See supra* pages 19-20, 27.

481 F. Supp. 2d 1059, 1080 (N.D. Cal. 2007); *Hells Canyon Pres. Council v. United States Forest Serv.*, 2003 U.S. Dist. LEXIS 26581, at *14 (D. Or. Feb. 11, 2003); *Yolano-Donnelly Tenant Ass'n v. Cisneros*, 1996 U.S. Dist. LEXIS 22778, at *33 (E.D. Cal. Mar. 8, 1996). The CEQ further describes "major federal actions" as including the "[a]doption of official policy, such as rules, regulations, and interpretations adopted pursuant" to the APA. 40 C.F.R. § 1508.18(b)(1); *see Hells Canyon*, 2003 U.S. Dist. LEXIS 26581, at *13-14.

In the Order, the FCC declares that it is exercising the Commission's authority to "issue interpretations of the statutory language and to adopt implementing regulations that clarify and specify the scope and effect of the Act." MC008. The FCC maintains that it is delineating "a category of state or local laws [that are] inconsistent with" the TCA "because [they] prohibit[] or ha[ve] the effect of prohibiting the relevant covered service." MC052; *see also id.* at MC002 ("remov[ing] regulatory barriers that would unlawfully inhibit the deployment of infrastructure necessary to support these new services"); *id.* at MC008 ("issu[ing] a clarifying interpretation of Sections 253 and 332(c)(7) . . . [so that] state and local oversight does

not materially inhibit wireless deployment"); *id.* at MC0013 ("act[ing] to reduce regulatory barriers to the deployment of wireless infrastructure"); *see also* 5 U.S.C. § 551(4) (defining "rule" as "an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy").

Moreover, the CEQ separately deems "major federal actions" as activities that are "potentially subject to federal control and responsibility" or are "regulated" by a federal agency. 40 C.F.R. § 1508.18. That is precisely what the FCC has done under the Order. The Commission sets forth specific rules that municipalities must follow when reviewing carrier applications for the installation of small cells and the provision of 5G services in public rights-of-way. *See, e.g.*, MC002 (eliminating "regulatory obstacles [that] have threatened the widespread deployment of these new services").

These restrictions are broad and cover everything from local fees and aesthetic concerns to applications and what the FCC states is the proper interpretation of the "material inhibit" standard.[46] In fact, the Order substantially restricts the amount of discretion that

[46] *Supra* pages 23-24.

municipalities may exercise in virtually all aspects related to the processing and approval of small cell applications. *See, e.g.*, *Hells Canyon*, 2003 U.S. Dist. LEXIS 26581, at *22 (finding "major federal action" where regulations governed use of private lands contained within a designated national recreation area).

2. "Significantly Affecting The Quality Of The Human Environment"

In addition, the Order may "significantly affect[] the quality of the human environment." 42 U.S.C. § 4332. Whether this factor is met depends on "both context and intensity." 40 C.F.R. § 1508.27.[47] Among the relevant considerations, "intensity" refers to the "severity of the impact," including the "degree to which the proposed action affects public health and safety." *Id.* Further, an agency must analyze whether possible effects are "highly uncertain," "unique," or "unknown," and if they are "likely to be highly controversial." *Id.*; *see also Nat'l Parks & Conservation Ass'n*, 241 F.3d at 731-32 (EIS required where "effects are highly uncertain or involve . . . unknown risks) (citation and

[47] "Context" requires the action to be analyzed in several contexts, such as "society as a whole (human, national), the affected region, the affected interests, and the locality." *Id.*

internal quotations omitted); *Sierra Club v. United States Forest Serv.*, 843 F.2d 1190, 1193 (9th Cir. 1988) ("The term 'controversial' refers to cases where a substantial dispute exists as to the size, nature, or *effect* of the major Federal action rather than to the existence of opposition to a use.") (citation and internal quotations omitted) (emphasis in original). Finally, even if the federal action is seemingly insignificant standing alone, the agency must still ask if it will act cumulatively with other effects to significantly impact the environment. 40 C.F.R. § 1508.27; *see Sierra Club*, 843 F.2d at 1194.

Importantly, no scientific certainty or consensus is required to constitute a significant effect. *Am. Bird Conservancy*, 516 F.3d at 1033 ("A precondition of certainty before initiating NEPA procedures would jeopardize NEPA's purpose to ensure that agencies consider environmental impacts before they act rather than wait until it is too late."); *see also Anderson*, 371 F.3d at 488 ("[P]laintiffs need not demonstrate that significant effects *will* occur. A showing that there are *substantial questions* whether a project may have a significant effect on the environment is sufficient.") (citation and internal quotations omitted) (emphasis in original); *Sierra Club*, 843 F.2d at 1193 (asking

whether "plaintiff has alleged facts which, if true, show that the proposed project *may* significantly degrade some human environmental factor. A determination that significant effects on the human environment will in fact occur is not essential.") (citation and internal quotations omitted) (emphasis in original).

Rather, the purpose of NEPA is to "obviate the need for such speculation by insuring that available data is gathered and analyzed prior to the implementation of the proposed action." *Found. for North Am. Wild Sheep v. United States Dept. of Agric.*, 681 F.2d 1172, 1179 (9th Cir. 1982); *see Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) ("NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast.").

Based on these factors, the Order may impose on Montgomery County and other municipalities the risk of significant environmental impacts that would not otherwise exist. As the FCC notes, "providers have been increasingly looking to densify their networks with new small cell deployments" and "must build out small cells at a faster pace and at a far greater density of deployment than before." MC002. The

Commission estimates that, within just a few years, the carriers will spend billions of dollars installing hundreds of thousands of 5G facilities, if not more.[48]

To support these providers, the Order's stated goal is to "remove regulatory barriers that would unlawfully inhibit the deployment of infrastructure necessary to support these new [5G] services." MC002. Thus, municipalities will be, by design, inundated with more 5G small cells in a shorter period of time and in more residential and commercial rights-of-way when compared to the status quo. Indeed, the rulemaking's title says it all – "*Accelerating* Wireless Broadband Deployment by *Removing Barriers* to Infrastructure Investment" (emphasis added).

As envisioned by the FCC, this small cell environment will constitute a dramatic shift away from the wireless landscape as it existed in 1996 when the current RF exposure standards were adopted. Instead of 50-200 foot towers situated miles apart, residential and other public areas will be blanketed with small cell poles of less than 50 feet in height. The poles will be separated by only a few hundred feet or less

[48] *Supra* pages 10-11.

and installed in local rights-of-way, like sidewalks and alleyways, only yards away from houses and businesses. Multiple antennas on each pole will radiate beams of RF energy in the direct-line-of-sight of bedrooms, offices, and other public spaces. The existing buffer between tower-mounted transmitters and individuals at ground level that currently mitigate RF signals and reduce human exposures will give way to highly "accessible" small cell antennas positioned directly adjacent to residents and businesses.[49]

The possibility of a new wireless infrastructure led commenters to raise concerns that NEPA seeks to address. Specifically, they identify potential "public health and safety" risks associated with increased human exposures to RF, including 5G MMWs. For instance, commenters reference thousands of peer-reviewed studies, as well as conclusions reached by independent research bodies NTP and IARC, identifying links between RF and non-thermal health risks, including cancer, DNA damage, reproductive harms, neurological impacts, and eye effects. They also identify potential "cumulative" impacts where 5G radiation from small cells will only increase the daily burden of RF

[49] *Supra* pages 8-10.

exposures from smart phones, multiple wireless devices, and existing cell towers.[50] And they demonstrate the "controversial" nature of 5G facilities, as commenters echoed warnings of hundreds of scientists and academics from around the world who petitioned the EU and WHO for additional research on non-thermal effects, coupled with a temporary moratorium on 5G technology.[51]

Moreover, even if studies have not conclusively shown that RF emissions pose a substantial risk of non-thermal effects, NEPA is designed to force agencies like the FCC to confront head-on, rather than ignore, these uncertainties.[52] In fact, the Commission predicted that

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[50] *Supra* pages 14, 16.

[51] *Supra* pages 15-16. This type of evidence is routinely used by courts when finding that a federal action may cause a significant environmental impact. *See, e.g.*, *Sierra Club*, 843 F.2d at 1193 (finding "controversial" a decision by the U.S. Forest Service to allow timber sales based on scientific evidence disputing the agency's conclusions of no significant environmental effects); *Found. for North Am. Wild Sheep*, 681 F.2d at 1182 (deeming "controversial" a U.S. Department of Agriculture finding of no significant impact on Bighorn Sheep where scientific experts criticized decision to reopen road); *Hells Canyon*, 2003 U.S. Dist. LEXIS 26581, at *14-15 (holding U.S. Forest Service regulations governing use of private lands in recreational area constitute a significant environmental impact based on evidence documenting adverse effects of various private enterprises, including feedlots, use of pesticides/herbicides, and grazing).

[52] *Supra* pages 42-43.

this dynamic would eventually play out in the context of RF standards. For instance, the FCC stated in 1996 that "research and analysis relating to RF safety and health is ongoing, and we expect changes in recommended exposure limits will occur in the future as knowledge increases in the field."[53] Further, as part of the 2013 NOI, the Commission similarly noted that a "great deal of scientific research has been completed in recent years and new research is currently underway, warranting a comprehensive examination of this and any other relevant information."[54] Given that the FCC has issued an Order that will substantially increase RF exposures in neighborhoods and other public areas, it was obligated under NEPA to fully review and evaluate this research.

D. Complying With NEPA Would Help Inform Decisions Made By The FCC Under The Order

If the FCC had completed the 2013 review before issuing the Order, it would have been able to make a more informed decision when

[53] 1996 FCC LEXIS 4081, at *3; *see id.* at *4 (stating NEPA requires the FCC to evaluate "human exposure to RF energy emitted by FCC-regulated transmitters and facilities."); OET Bulletin 65 at 6 (same).

[54] 2013 FCC LEXIS 1257 at *250.

promulgating the Order and accelerating the rollout of 5G technologies. For instance, if the Commission determined that small cells do not present a significant environmental risk under the current RF exposure limits, it could have issued a FONSI and no changes to the Order vis-à-vis RF would have been required. Under that scenario, Montgomery County and other municipalities could also throw their full support behind 5G and their citizens would have confidence that the 5G facilities outside their homes and businesses are safe.

Alternatively, if the FCC found that the current RF standards do not protect the public, the Commission could have taken this analysis into account, particularly in light of its duty to balance the promotion of wireless technologies with ensuring public health and safety.[55] For instance, based solely on aesthetic concerns, the Commission prohibits local governments from requiring complete undergrounding of facilities. MC046. But if 5G small cells present a risk, the FCC might have required undergrounding in certain areas, such as next to schools or residences built only a few feet from rights-of-way.

[55] *Supra* pages 20-21; *see also Robertson*, 490 U.S. at 351-52 (noting that NEPA requires agencies to consider mitigation measures).

Moreover, the Order imposes no restrictions on the number of transmitters in a given area or minimum spacing of poles. MC0046. But if RF emissions from 5G facilities, including MMWs, raise safety issues, the FCC might have placed restrictions on the density of 5G transmitters and poles in highly populated areas. Finally, the Commission could have, at a minimum, first updated the RF standards and then issued the Order knowing that, under the TCA, carriers must nevertheless comply with any applicable RF exposure limits.

E. This Court Should Vacate And Remand The Order Because The FCC Failed To Comply With NEPA

In the end, however, the FCC never addressed any of these issues or explained why NEPA does not apply here. The Order clearly does not constitute a "reasonable" decision, as it fell well short of being "fully informed and well considered." *High Sierra Hikers Ass'n*, 390 F.3d at 640. Accordingly, this court should find that the FCC violated NEPA, and vacate and remand the Order for further proceedings. *See* 5 U.S.C. 706(2) (court must hold unlawful and set aside agency action that did not comply with required procedures); *see also Shearwater*, 2015 U.S. Dist. LEXIS 106277, at *77 (remanding rule that was prepared without an EA or EIS which impacted bald eagle incidental take permits); *Hells*

Canyon Pres. Council v. Connaughton, 2013 U.S. Dist. LEXIS 10539, at *23-24 (D. Or. Jan. 25, 2013) (remanding grazing permits where agency failed to explain why permit renewals were not subject to NEPA).

II. The FCC Violated The APA When It Did Not Determine Whether The RF Standards Protect Human Health Or Explain Why It Ignored This Relevant Factor

Similar to the FCC's shortcomings under NEPA, the FCC also violated the APA because it failed to consider whether the current RF standards will fully protect the health and safety of citizens living and working directly adjacent to 5G small cells and did not explain why it ignored this relevant factor. Accordingly, the Order constitutes arbitrary and capricious rulemaking and must be set aside.

A. The APA Requires Agencies To Consider All Relevant Factors And Adequately Explain Its Decision

Under the APA, courts will strike down agency action as arbitrary and capricious if the agency has, *inter alia*, "entirely failed to consider an important aspect of the problem." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). The agency must "examine the relevant data and articulate a satisfactory explanation for its action." *Alliance for the Wild Rockies v. United States Forest Serv.*, 907 F.3d 1105, 1112 (9th Cir. 2018) (citation and internal quotations

omitted); *see also Ctr. for Biological Diversity v. United States Bureau of Land Mgmt.*, 698 F.3d 1101, 1124 (9th Cir. 2012). And in doing so, the agency must "meaningfully address" related comments in the record. *Nat'l Parks Conservation Ass'n v. United States EPA*, 788 F.3d 1134, 1146 (9th Cir. 2015).

B. Potential RF Health Risks Are Relevant Factors That Should Have Been Considered In The Order

The FCC has repeatedly acknowledged that it has a duty to maintain RF standards that are protective of human health. Because TCA § 332(c)(7)(B)(iv) prohibits state and local governments from regulating small cells based on RF concerns, the sole "authority to adopt and enforce RF exposure limits" rests with the Commission. MC014 n.72; *see also* 2013 FCC LEXIS 1257, at *117 n.176 ("The Commission's authority to adopt and enforce RF exposure limits beyond the prospective limitations of NEPA is well established."); *Farina*, 625 F.3d at 128 ("[A]lthough the FCC's RF regulations were triggered by the Commission's NEPA obligations, health and safety considerations were already within the FCC's mandate."). Indeed, as the TCA's legislative history makes clear, this involved an important tradeoff.

In exchange for avoiding a patchwork of RF standards across the country, the FCC must ensure that any federal-based exposure limits contain "adequate, appropriate and necessary levels of protection for the public."[56] While "it is in the national interest that uniform consistent [RF] requirements" are put in place, the Commission must adopt exposure standards that provide "adequate safeguards [for] the public health and safety."[57] In fact, when discussing its preemptive authority under 47 U.S.C. § 332(c)(7)(B)(iv), the FCC stated that it has a mandate to balance the statutory goal of promoting the interests of wireless providers "without compromising public health and safety."[58]

Moreover, the FCC has also recognized that it has a continuing obligation to revise the RF standards as research on potential RF health impacts and wireless technology evolves.[59] Indeed, in the 2013 NOI, the Commission stated that it must "gather information to determine whether our general regulations and policies limiting human

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[56] H. Rep. No. 104-204, at 95, *as reprinted in* 1996 U.S.C.C.A.N. at 61-62.

[57] H.R. No. 104-204, at 94, *as reprinted in* 1996 U.S.C.C.A.N. at 61; *see* MC014 n.72 (quoting same).

[58] 1997 FCC LEXIS 4605, at *119.

[59] *Supra* pages 11-12, 19.

exposures to radiofrequency (RF) radiation are still appropriately drawn."[60] *See also id.* at *8 ("we ask whether our exposure limits remain appropriate given the differences in the various recommendations that have developed and recognizing additional progress in research subsequent to the adoption of our existing exposure limits"); *id.* at *9 ("we ask whether any precautionary action would be either useful or counterproductive, given that there is a lack of scientific consensus about the possibility of adverse effects at exposure levels at or below our existing limits").

Accordingly, whether the current RF standards are protective of human health, including any potential non-thermal risks, is a relevant factor that the FCC should have considered when promulgating the Order. By the Commission's own admission, the Order will hasten the deployment of 5G facilities and the provision of services. MC002. The Order will mean more small cells, in more locations, and sooner than later. Indeed, the whole point of the Order is to accelerate the rollout of 5G by eliminating perceived regulatory barriers supposedly erected by state and local governments in the past. Clearly, RF safety issues were

[60] 2013 FCC LEXIS 1257, at *250.

implicated by the Order. It was incumbent on the FCC, therefore, to determine whether the Order would increase harmful RF exposures in residential and public areas, particularly in light of the fact that countless 5G antennas will be placed next to homes and businesses that are spaced only about hundred feet apart.[61]

C. The FCC Could Not Lawfully Delay The 2013 Review While Issuing The Order

Further, it was an abuse of discretion to issue the Order while deferring any evaluation of this entirely new RF environment and its potential health effects. Under the APA, an agency cannot delay consideration of relevant factors where it "implements one policy and decides to consider the merits of a potentially inconsistent policy in the very near future." *ITT World Commc'ns, Inc. v. FCC*, 725 F.2d 732, 754 (D.C. Cir. 1984). This holds particularly true where adverse impacts of the later decision cannot be reversed. According to the D.C. Circuit:

> [P]ostponement will be most easily justified when an agency acts against a background of rapid technical and social change and when the agency's initial decision as a practical matter is reversible should the future proceedings yield drastically unexpected results. In contrast, an incremental approach to agency decision making is least justified when small errors in predictive judgments can have catastrophic

[61] *Supra* pages 9-10.

> effects on the public welfare or when future proceedings are likely to be systemically defective in taking into account certain relevant interests.

Nat'l Ass'n of Broadcasters v. FCC, 740 F.2d 1190, 1211 (D.C. Cir. 1984); *see ITT World Commc'ns*, 725 F.2d at 754-755 (holding FCC abused its discretion when it restructured relationship between cable and satellite services while deferring consideration of potentially substantial impacts on that policy related to direct access and independent earth station ownership issues); *California v. United States Dep't of Interior*, 2019 U.S. Dist. LEXIS 66300, at *40-50 (N.D. Cal. 2019) (finding arbitrary and capricious a decision to defer consideration of a rule's merits, which governed royalty payments on federal leases, before first repealing the rule in a separate proceeding).

D. Considering RF Issues Would Have Eliminated Potential Harms That Cannot Be Later Rectified

The FCC should have revisited the current RF standards before issuing the Order to avoid harms that cannot be rectified later. If the new 5G environment, in fact, poses health risks, any prior rollout of 5G will have potentially injured citizens of Montgomery County and other municipalities, including sensitive populations like children, that cannot be undone. Such a result would be unconscionable. Moreover, if

a substantial number of 5G antennas and poles are installed before the 2013 review is completed, it is entirely unclear from the record whether remedial measures could be taken to reduce safety concerns without substantially disturbing the newly installed infrastructure. Certainly, neither the FCC nor the wireless providers would want to be placed in the unfortunate position of having to relocate and/or remove countless 5G poles after the fact.

Conversely, if the FCC finds that 5G facilities will not pose an undue health risk and/or that the current RF standards are adequate to ensure public safety, then Montgomery County and its citizens will have confidence that the provision of 5G services does not impose an unnecessary risk. Indeed, completing the 2013 review before taking further action to address local zoning would seem to help, not hinder the adoption of 5G, as Montgomery County and others could fully support wireless development in their communities.[62] But that cannot happen if the FCC puts the cart before the horse. As it stands now, no state or local government has authority to account for health and safety

[62] *Supra* pages 24-26.

concerns related to RF. Only the FCC does. Thus, it is imperative that the Commission answer these questions now.

E. This Court Should Vacate And Remand The Order Because The FCC Failed To Comply With The APA

As with NEPA, the FCC never addressed relevant issues of RF exposures and whether the current RF standards must be updated. The Commission also never explained its decision to summarily reject any comments submitted in the record raising such concerns. As such, the Order should be vacated and remanded so that the FCC can complete the 2013 review. *See, e.g.*, *Nat'l Parks Conservation Ass'n*, 788 F.3d at 1149 (vacating and remanding rule where agency failed to explain reasoning); *Ctr. for Biological Diversity*, 698 F.3d at 1128 (vacating and remanding biological opinion that did not consider all relevant factors); *ITT World Commc'ns*, 725 F.2d at 756 (vacating and remanding deregulatory action to weigh additional factors).

CONCLUSION

Based on the foregoing, this Court should grant Montgomery County's Petition for Review and: (i) declare that the FCC violated the NEPA; (ii) declare that the FCC violated the APA; (iii) vacate and

remand the Order for further agency proceedings; and (iv) retain jurisdiction over this case. Oral argument is requested.

/s/ *Eric P. Gotting*
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STATEMENT OF RELATED CASES

This case (19-70147) has been consolidated with the following actions seeking judicial review of the Small Cell Order:

Sprint Corp. v. FCC, No. 19-70123
Verizon Commc'ns, Inc. v. FCC, No. 19-70124
Puerto Rico Telephone Co. v. FCC, No. 19-70125
City of Seattle v. FCC, No. 19-70136
City of San Jose v. FCC, No. 19-70144
City and County of San Francisco v. FCC, No. 19-70145
City of Huntington Beach v. FCC, No. 19-70146
AT&T Services, Inc. v. FCC, No. 19-70326
Am. Public Power Ass'n v. FCC, No. 19-70339
City of Austin v. FCC, No. 19-70341
City of Eugene v. FCC, No. 19-70344
AEPSC v. FCC, No. 19-70490

In addition, *United Keetoowah Band of Cherokee Indians, et al. v. FCC*, No. 18-1129 (D.C. Cir.) in currently pending before the United States Court of Appeals for the District of Columbia. This case seeks judicial review of a different FCC order (*In the Matter of Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*; *see* 2018 FCC LEXIS 1008 (March 22, 2018)). However, Petitioners Natural Resources Defense Council and Edward B. Myers also raise issues related to RF and the FCC's RF standards.

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

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I hereby certify that, on June 10, 2019, I filed the foregoing in the United States Court of Appeals for the Ninth Circuit via the CM/ECF system. I further certify that all parties are registered CM/ECF users, and that service will be accomplished via electronic filing.

/s/ *Eric P. Gotting*
Eric P. Gotting

ADDENDUM

ADDENDUM

Table of Contents

Federal Communications Commission Regulations

such determination may bring an action in an appropriate Federal district court to determine whether the agreement or statement meets the requirements of section 251 of this title and this section.

(f) Statements of generally available terms

(1) In general

A Bell operating company may prepare and file with a State commission a statement of the terms and conditions that such company generally offers within that State to comply with the requirements of section 251 of this title and the regulations thereunder and the standards applicable under this section.

(2) State commission review

A State commission may not approve such statement unless such statement complies with subsection (d) of this section and section 251 of this title and the regulations thereunder. Except as provided in section 253 of this title, nothing in this section shall prohibit a State commission from establishing or enforcing other requirements of State law in its review of such statement, including requiring compliance with intrastate telecommunications service quality standards or requirements.

(3) Schedule for review

The State commission to which a statement is submitted shall, not later than 60 days after the date of such submission—

(A) complete the review of such statement under paragraph (2) (including any reconsideration thereof), unless the submitting carrier agrees to an extension of the period for such review; or

(B) permit such statement to take effect.

(4) Authority to continue review

Paragraph (3) shall not preclude the State commission from continuing to review a statement that has been permitted to take effect under subparagraph (B) of such paragraph or from approving or disapproving such statement under paragraph (2).

(5) Duty to negotiate not affected

The submission or approval of a statement under this subsection shall not relieve a Bell operating company of its duty to negotiate the terms and conditions of an agreement under section 251 of this title.

(g) Consolidation of State proceedings

Where not inconsistent with the requirements of this chapter, a State commission may, to the extent practical, consolidate proceedings under sections 214(e), 251(f), 253 of this title, and this section in order to reduce administrative burdens on telecommunications carriers, other parties to the proceedings, and the State commission in carrying out its responsibilities under this chapter.

(h) Filing required

A State commission shall make a copy of each agreement approved under subsection (e) and each statement approved under subsection (f) available for public inspection and copying within 10 days after the agreement or statement is approved. The State commission may charge a reasonable and nondiscriminatory fee to the parties to the agreement or to the party filing the statement to cover the costs of approving and filing such agreement or statement.

(i) Availability to other telecommunications carriers

A local exchange carrier shall make available any interconnection, service, or network element provided under an agreement approved under this section to which it is a party to any other requesting telecommunications carrier upon the same terms and conditions as those provided in the agreement.

(j) "Incumbent local exchange carrier" defined

For purposes of this section, the term ''incumbent local exchange carrier'' has the meaning provided in section 251(h) of this title.

(June 19, 1934, ch. 652, title II, § 252, as added Pub. L. 104–104, title I, § 101(a), Feb. 8, 1996, 110 Stat. 66.)

REFERENCES IN TEXT

This chapter, referred to in subsec. (g), was in the original ''this Act'', meaning act June 19, 1934, ch. 652, 48 Stat. 1064, known as the Communications Act of 1934, which is classified principally to this chapter. For complete classification of this Act to the Code, see section 609 of this title and Tables.

§ 253. Removal of barriers to entry

(a) In general

No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.

(b) State regulatory authority

Nothing in this section shall affect the ability of a State to impose, on a competitively neutral basis and consistent with section 254 of this title, requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of telecommunications services, and safeguard the rights of consumers.

(c) State and local government authority

Nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.

(d) Preemption

If, after notice and an opportunity for public comment, the Commission determines that a State or local government has permitted or imposed any statute, regulation, or legal requirement that violates subsection (a) or (b), the Commission shall preempt the enforcement of such statute, regulation, or legal requirement to the extent necessary to correct such violation or inconsistency.

(e) Commercial mobile service providers

Nothing in this section shall affect the application of section 332(c)(3) of this title to commercial mobile service providers.

(f) Rural markets

It shall not be a violation of this section for a State to require a telecommunications carrier that seeks to provide telephone exchange service or exchange access in a service area served by a rural telephone company to meet the requirements in section 214(e)(1) of this title for designation as an eligible telecommunications carrier for that area before being permitted to provide such service. This subsection shall not apply—

(1) to a service area served by a rural telephone company that has obtained an exemption, suspension, or modification of section 251(c)(4) of this title that effectively prevents a competitor from meeting the requirements of section 214(e)(1) of this title; and

(2) to a provider of commercial mobile services.

(June 19, 1934, ch. 652, title II, § 253, as added Pub. L. 104–104, title I, § 101(a), Feb. 8, 1996, 110 Stat. 70.)

§ 254. Universal service

(a) Procedures to review universal service requirements

(1) Federal-State Joint Board on universal service

Within one month after February 8, 1996, the Commission shall institute and refer to a Federal-State Joint Board under section 410(c) of this title a proceeding to recommend changes to any of its regulations in order to implement sections 214(e) of this title and this section, including the definition of the services that are supported by Federal universal service support mechanisms and a specific timetable for completion of such recommendations. In addition to the members of the Joint Board required under section 410(c) of this title, one member of such Joint Board shall be a State-appointed utility consumer advocate nominated by a national organization of State utility consumer advocates. The Joint Board shall, after notice and opportunity for public comment, make its recommendations to the Commission 9 months after February 8, 1996.

(2) Commission action

The Commission shall initiate a single proceeding to implement the recommendations from the Joint Board required by paragraph (1) and shall complete such proceeding within 15 months after February 8, 1996. The rules established by such proceeding shall include a definition of the services that are supported by Federal universal service support mechanisms and a specific timetable for implementation. Thereafter, the Commission shall complete any proceeding to implement subsequent recommendations from any Joint Board on universal service within one year after receiving such recommendations.

(b) Universal service principles

The Joint Board and the Commission shall base policies for the preservation and advancement of universal service on the following principles:

(1) Quality and rates

Quality services should be available at just, reasonable, and affordable rates.

(2) Access to advanced services

Access to advanced telecommunications and information services should be provided in all regions of the Nation.

(3) Access in rural and high cost areas

Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.

(4) Equitable and nondiscriminatory contributions

All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.

(5) Specific and predictable support mechanisms

There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service.

(6) Access to advanced telecommunications services for schools, health care, and libraries

Elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services as described in subsection (h).

(7) Additional principles

Such other principles as the Joint Board and the Commission determine are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with this chapter.

(c) Definition

(1) In general

Universal service is an evolving level of telecommunications services that the Commission shall establish periodically under this section, taking into account advances in telecommunications and information technologies and services. The Joint Board in recommending, and the Commission in establishing, the definition of the services that are supported by Federal universal service support mechanisms shall consider the extent to which such telecommunications services—

(A) are essential to education, public health, or public safety;

(B) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers;

(C) are being deployed in public telecommunications networks by telecommunications carriers; and

AMENDMENTS

1994—Pub. L. 103–414 amended section catchline generally.

1991—Pub. L. 102–243 inserted ''and AM radio stations'' in section catchline, designated existing provisions as subsec. (a) and inserted heading, and added subsec. (b).

§ 332. Mobile services

(a) Factors which Commission must consider

In taking actions to manage the spectrum to be made available for use by the private mobile services, the Commission shall consider, consistent with section 151 of this title, whether such actions will—

(1) promote the safety of life and property;

(2) improve the efficiency of spectrum use and reduce the regulatory burden upon spectrum users, based upon sound engineering principles, user operational requirements, and marketplace demands;

(3) encourage competition and provide services to the largest feasible number of users; or

(4) increase interservice sharing opportunities between private mobile services and other services.

(b) Advisory coordinating committees

(1) The Commission, in coordinating the assignment of frequencies to stations in the private mobile services and in the fixed services (as defined by the Commission by rule), shall have authority to utilize assistance furnished by advisory coordinating committees consisting of individuals who are not officers or employees of the Federal Government.

(2) The authority of the Commission established in this subsection shall not be subject to or affected by the provisions of part III of title 5 or section 1342 of title 31.

(3) Any person who provides assistance to the Commission under this subsection shall not be considered, by reason of having provided such assistance, a Federal employee.

(4) Any advisory coordinating committee which furnishes assistance to the Commission under this subsection shall not be subject to the provisions of the Federal Advisory Committee Act.

(c) Regulatory treatment of mobile services

(1) Common carrier treatment of commercial mobile services

(A) A person engaged in the provision of a service that is a commercial mobile service shall, insofar as such person is so engaged, be treated as a common carrier for purposes of this chapter, except for such provisions of subchapter II as the Commission may specify by regulation as inapplicable to that service or person. In prescribing or amending any such regulation, the Commission may not specify any provision of section 201, 202, or 208 of this title, and may specify any other provision only if the Commission determines that—

(i) enforcement of such provision is not necessary in order to ensure that the charges, practices, classifications, or regulations for or in connection with that service are just and reasonable and are not unjustly or unreasonably discriminatory;

(ii) enforcement of such provision is not necessary for the protection of consumers; and

(iii) specifying such provision is consistent with the public interest.

(B) Upon reasonable request of any person providing commercial mobile service, the Commission shall order a common carrier to establish physical connections with such service pursuant to the provisions of section 201 of this title. Except to the extent that the Commission is required to respond to such a request, this subparagraph shall not be construed as a limitation or expansion of the Commission's authority to order interconnection pursuant to this chapter.

(C) The Commission shall review competitive market conditions with respect to commercial mobile services and shall include in its annual report an analysis of those conditions. Such analysis shall include an identification of the number of competitors in various commercial mobile services, an analysis of whether or not there is effective competition, an analysis of whether any of such competitors have a dominant share of the market for such services, and a statement of whether additional providers or classes of providers in those services would be likely to enhance competition. As a part of making a determination with respect to the public interest under subparagraph (A)(iii), the Commission shall consider whether the proposed regulation (or amendment thereof) will promote competitive market conditions, including the extent to which such regulation (or amendment) will enhance competition among providers of commercial mobile services. If the Commission determines that such regulation (or amendment) will promote competition among providers of commercial mobile services, such determination may be the basis for a Commission finding that such regulation (or amendment) is in the public interest.

(D) The Commission shall, not later than 180 days after August 10, 1993, complete a rulemaking required to implement this paragraph with respect to the licensing of personal communications services, including making any determinations required by subparagraph (C).

(2) Non-common carrier treatment of private mobile services

A person engaged in the provision of a service that is a private mobile service shall not, insofar as such person is so engaged, be treated as a common carrier for any purpose under this chapter. A common carrier (other than a person that was treated as a provider of a private land mobile service prior to August 10, 1993) shall not provide any dispatch service on any frequency allocated for common carrier service, except to the extent such dispatch service is provided on stations licensed in the domestic public land mobile radio service before January 1, 1982. The Commission may by regulation terminate, in whole or in part, the prohibition contained in the preceding sentence if the Commission determines that such termination will serve the public interest.

(3) State preemption

(A) Notwithstanding sections 152(b) and 221(b) of this title, no State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service, except that this paragraph shall not prohibit a State from regulating the other terms and conditions of commercial mobile services. Nothing in this subparagraph shall exempt providers of commercial mobile services (where such services are a substitute for land line telephone exchange service for a substantial portion of the communications within such State) from requirements imposed by a State commission on all providers of telecommunications services necessary to ensure the universal availability of telecommunications service at affordable rates. Notwithstanding the first sentence of this subparagraph, a State may petition the Commission for authority to regulate the rates for any commercial mobile service and the Commission shall grant such petition if such State demonstrates that—

(i) market conditions with respect to such services fail to protect subscribers adequately from unjust and unreasonable rates or rates that are unjustly or unreasonably discriminatory; or

(ii) such market conditions exist and such service is a replacement for land line telephone exchange service for a substantial portion of the telephone land line exchange service within such State.

The Commission shall provide reasonable opportunity for public comment in response to such petition, and shall, within 9 months after the date of its submission, grant or deny such petition. If the Commission grants such petition, the Commission shall authorize the State to exercise under State law such authority over rates, for such periods of time, as the Commission deems necessary to ensure that such rates are just and reasonable and not unjustly or unreasonably discriminatory.

(B) If a State has in effect on June 1, 1993, any regulation concerning the rates for any commercial mobile service offered in such State on such date, such State may, no later than 1 year after August 10, 1993, petition the Commission requesting that the State be authorized to continue exercising authority over such rates. If a State files such a petition, the State's existing regulation shall, notwithstanding subparagraph (A), remain in effect until the Commission completes all action (including any reconsideration) on such petition. The Commission shall review such petition in accordance with the procedures established in such subparagraph, shall complete all action (including any reconsideration) within 12 months after such petition is filed, and shall grant such petition if the State satisfies the showing required under subparagraph (A)(i) or (A)(ii). If the Commission grants such petition, the Commission shall authorize the State to exercise under State law such authority over rates, for such period of time, as the Commission deems necessary to ensure that such rates are just and reasonable and not unjustly or unreasonably discriminatory. After a reasonable period of time, as determined by the Commission, has elapsed from the issuance of an order under subparagraph (A) or this subparagraph, any interested party may petition the Commission for an order that the exercise of authority by a State pursuant to such subparagraph is no longer necessary to ensure that the rates for commercial mobile services are just and reasonable and not unjustly or unreasonably discriminatory. The Commission shall provide reasonable opportunity for public comment in response to such petition, and shall, within 9 months after the date of its submission, grant or deny such petition in whole or in part.

(4) Regulatory treatment of communications satellite corporation

Nothing in this subsection shall be construed to alter or affect the regulatory treatment required by title IV of the Communications Satellite Act of 1962 [47 U.S.C. 741 et seq.] of the corporation authorized by title III of such Act [47 U.S.C. 731 et seq.].

(5) Space segment capacity

Nothing in this section shall prohibit the Commission from continuing to determine whether the provision of space segment capacity by satellite systems to providers of commercial mobile services shall be treated as common carriage.

(6) Foreign ownership

The Commission, upon a petition for waiver filed within 6 months after August 10, 1993, may waive the application of section 310(b) of this title to any foreign ownership that lawfully existed before May 24, 1993, of any provider of a private land mobile service that will be treated as a common carrier as a result of the enactment of the Omnibus Budget Reconciliation Act of 1993, but only upon the following conditions:

(A) The extent of foreign ownership interest shall not be increased above the extent which existed on May 24, 1993.

(B) Such waiver shall not permit the subsequent transfer of ownership to any other person in violation of section 310(b) of this title.

(7) Preservation of local zoning authority

(A) General authority

Except as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

(B) Limitations

(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof—

(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

(iii) Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

(iv) 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 Commission's regulations concerning such emissions.

(v) 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 this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

(C) Definitions

For purposes of this paragraph—

(i) the term ''personal wireless services'' means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

(ii) the term ''personal wireless service facilities'' means facilities for the provision of personal wireless services; and

(iii) the term ''unlicensed wireless service'' 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 (as defined in section 303(v) of this title).

(8) Mobile services access

A person engaged in the provision of commercial mobile services, insofar as such person is so engaged, shall not be required to provide equal access to common carriers for the provision of telephone toll services. If the Commission determines that subscribers to such services are denied access to the provider of telephone toll services of the subscribers' choice, and that such denial is contrary to the public interest, convenience, and necessity, then the Commission shall prescribe regulations to afford subscribers unblocked access to the provider of telephone toll services of the subscribers' choice through the use of a carrier identification code assigned to such provider or other mechanism. The requirements for unblocking shall not apply to mobile satellite services unless the Commission finds it to be in the public interest to apply such requirements to such services.

(d) Definitions

For purposes of this section—

(1) the term ''commercial mobile service'' means any mobile service (as defined in section 153 of this title) that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public, as specified by regulation by the Commission;

(2) the term ''interconnected service'' means service that is interconnected with the public switched network (as such terms are defined by regulation by the Commission) or service for which a request for interconnection is pending pursuant to subsection (c)(1)(B); and

(3) the term ''private mobile service'' means any mobile service (as defined in section 153 of this title) that is not a commercial mobile service or the functional equivalent of a commercial mobile service, as specified by regulation by the Commission.

(June 19, 1934, ch. 652, title III, § 332, formerly § 331, as added Pub. L. 97–259, title I, § 120(a), Sept. 13, 1982, 96 Stat. 1096; renumbered § 332, Pub. L. 102–385, § 25(b), Oct. 5, 1992, 106 Stat. 1502; amended Pub. L. 103–66, title VI, § 6002(b)(2)(A), Aug. 10, 1993, 107 Stat. 392; Pub. L. 104–104, § 3(d)(2), title VII, §§ 704(a), 705, Feb. 8, 1996, 110 Stat. 61, 151, 153.)

REFERENCES IN TEXT

Provisions of part III of title 5, referred to in subsec. (b)(2), are classified to section 2101 et seq. of Title 5, Government Organization and Employees.

The Federal Advisory Committee Act, referred to in subsec. (b)(4), is Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, as amended, which is set out in the Appendix to Title 5.

This chapter, referred to in subsec. (c), was in the original ''this Act'', meaning act June 19, 1934, ch. 652, 48 Stat. 1064, known as the Communications Act of 1934, which is classified principally to this chapter. For complete classification of this Act to the Code, see section 609 of this title and Tables.

The Communications Satellite Act of 1962, referred to in subsec. (c)(4), is Pub. L. 87–624, Aug. 31, 1962, 76 Stat. 419, as amended. Titles III and IV of the Act are classified generally to subchapters III (§ 731 et seq.) and IV (§ 741 et seq.), respectively, of chapter 6 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 701 of this title and Tables.

The Omnibus Budget Reconciliation Act of 1993, referred to in subsec. (c)(6), is Pub. L. 103–66, Aug. 10, 1993, 107 Stat. 312, as amended. For complete classification of this Act to the Code, see Tables.

CODIFICATION

In subsec. (b)(2), ''section 1342 of title 31'' substituted for ''section 3679(b) of the Revised Statutes (31 U.S.C. 665(b))'' on authority of Pub. L. 97–258, § 4(b), Sept. 13, 1982, 96 Stat. 1067, the first section of which enacted Title 31, Money and Finance.

AMENDMENTS

1996—Subsec. (c)(7). Pub. L. 104–104, § 704(a), added par. (7).

National Environmental Policy Act

§ 4321. Congressional declaration of purpose

The purposes of this chapter are: To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.

(Pub. L. 91–190, § 2, Jan. 1, 1970, 83 Stat. 852.)

SHORT TITLE

Section 1 Pub. L. 91–190 provided: ''That this Act [enacting this chapter] may be cited as the 'National Environmental Policy Act of 1969'.''

TRANSFER OF FUNCTIONS

Enforcement functions of Secretary or other official in Department of the Interior related to compliance with system activities requiring coordination and approval under this chapter, and enforcement functions of Secretary or other official in Department of Agriculture, insofar as they involve lands and programs under jurisdiction of that Department, related to compliance with this chapter with respect to pre-construction, construction, and initial operation of transportation system for Canadian and Alaskan natural gas transferred to Federal Inspector, Office of Federal Inspector for Alaska Natural Gas Transportation System, until first anniversary of date of initial operation of Alaska Natural Gas Transportation System, see Reorg. Plan No. 1 of 1979, §§ 102(e), (f), 203(a), 44 F.R. 33663, 33666, 93 Stat. 1373, 1376, effective July 1, 1979, set out in the Appendix to Title 5, Government Organization and Employees. Office of Federal Inspector for the Alaska Natural Gas Transportation System abolished and functions and authority vested in Inspector transferred to Secretary of Energy by section 3012(b) of Pub. L. 102–486, set out as an Abolition of Office of Federal Inspector note under section 719e of Title 15, Commerce and Trade. Functions and authority vested in Secretary of Energy subsequently transferred to Federal Coordinator for Alaska Natural Gas Transportation Projects by section 720d(f) of Title 15.

EMERGENCY PREPAREDNESS FUNCTIONS

For assignment of certain emergency preparedness functions to Administrator of Environmental Protection Agency, see Parts 1, 2, and 16 of Ex. Ord. No. 12656, Nov. 18, 1988, 53 F.R. 47491, set out as a note under section 5195 of this title.

ENVIRONMENTAL PROTECTION AGENCY HEADQUARTERS

Pub. L. 112–237, § 2, Dec. 28, 2012, 126 Stat. 1628, provided that:

''(a) *Redesignation.*—The Environmental Protection Agency Headquarters located at 1200 Pennsylvania Ave-

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

BARACK OBAMA.

EX. ORD. NO. 13751. SAFEGUARDING THE NATION FROM THE IMPACTS OF INVASIVE SPECIES

Ex. Ord. No. 13751, Dec. 5, 2016, 81 F.R. 88609, provided:

By the authority vested in me as President by the Constitution and to ensure the faithful execution of the laws of the United States of America, including the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, (16 U.S.C. 4701 et seq.), the Plant Protection Act (7 U.S.C. 7701 et seq.), the Lacey Act, as amended (18 U.S.C. 42, 16 U.S.C. 3371–3378 et seq.), the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), the Noxious Weed Control and Eradication Act of 2004 (7 U.S.C. 7781 et seq.), and other pertinent statutes, to prevent the introduction of invasive species and provide for their control, and to minimize the economic, plant, animal, ecological, and human health impacts that invasive species cause, it is hereby ordered as follows:

SECTION 1. *Policy*. It is the policy of the United States to prevent the introduction, establishment, and spread of invasive species, as well as to eradicate and control populations of invasive species that are established. Invasive species pose threats to prosperity, security, and quality of life. They have negative impacts on the environment and natural resources, agriculture and food production systems, water resources, human, animal, and plant health, infrastructure, the economy, energy, cultural resources, and military readiness. Every year, invasive species cost the United States billions of dollars in economic losses and other damages.

Of substantial growing concern are invasive species that are or may be vectors, reservoirs, and causative agents of disease, which threaten human, animal, and plant health. The introduction, establishment, and spread of invasive species create the potential for serious public health impacts, especially when considered in the context of changing climate conditions. Climate change influences the establishment, spread, and impacts of invasive species.

Executive Order 13112 of February 3, 1999 (Invasive Species), called upon executive departments and agencies to take steps to prevent the introduction and spread of invasive species, and to support efforts to eradicate and control invasive species that are established. Executive Order 13112 also created a coordinating body—the Invasive Species Council, also referred to as the National Invasive Species Council—to oversee implementation of the order, encourage proactive planning and action, develop recommendations for international cooperation, and take other steps to improve the Federal response to invasive species. Past efforts at preventing, eradicating, and controlling invasive species demonstrated that collaboration across Federal, State, local, tribal, and territorial government; stakeholders; and the private sector is critical to minimizing the spread of invasive species and that coordinated action is necessary to protect the assets and security of the United States.

This order amends Executive Order 13112 and directs actions to continue coordinated Federal prevention and control efforts related to invasive species. This order maintains the National Invasive Species Council (Council) and the Invasive Species Advisory Committee; expands the membership of the Council; clarifies the operations of the Council; incorporates considerations of human and environmental health, climate change, technological innovation, and other emerging priorities into Federal efforts to address invasive species; and strengthens coordinated, cost-efficient Federal action.

SEC. 2. *Definitions*. [Amended Ex. Ord. No. 13112, set out as a note above.]

SEC. 3. *Federal Agency Duties*. [Amended Ex. Ord. No. 13112, set out as a note above.]

SEC. 4. *Emerging Priorities*. Federal agencies that are members of the Council and Federal interagency bodies working on issues relevant to the prevention, eradication, and control of invasive species shall take emerging priorities into consideration, including:

(a) Federal agencies shall consider the potential public health and safety impacts of invasive species, especially those species that are vectors, reservoirs, and causative agents of disease. The Department of Health and Human Services, in coordination and consultation with relevant agencies as appropriate, shall within 1 year of this order, and as requested by the Council thereafter, provide the Office of Science and Technology Policy and the Council a report on public health impacts associated with invasive species. That report shall describe the disease, injury, immunologic, and safety impacts associated with invasive species, including any direct and indirect impacts on low-income, minority, and tribal communities.

(b) Federal agencies shall consider the impacts of climate change when working on issues relevant to the prevention, eradication, and control of invasive species, including in research and monitoring efforts, and integrate invasive species into Federal climate change coordinating frameworks and initiatives.

(c) Federal agencies shall consider opportunities to apply innovative science and technology when addressing the duties identified in section 2 of Executive Order 13112, as amended, including, but not limited to, promoting open data and data analytics; harnessing technological advances in remote sensing technologies, molecular tools, cloud computing, and predictive analytics; and using tools such as challenge prizes, citizen science, and crowdsourcing.

SEC. 5. *National Invasive Species Council*. [Amended Ex. Ord. No. 13112, set out as a note above.]

SEC. 6. *Duties of the National Invasive Species Council*. [Amended Ex. Ord. No. 13112, set out as a note above.]

SEC. 7. *National Invasive Species Council Management Plan*. [Amended Ex. Ord. No. 13112, set out as a note above.]

SEC. 8. *Actions of the Department of State and Department of Defense*. [Amended Ex. Ord. No. 13112, set out as a note above.]

SEC. 9. *Obligations of the Department of Health and Human Services*. [Amended Ex. Ord. No. 13112, set out as a note above.]

SEC. 10. *General Provisions*. (a) Nothing in this order shall be construed to impair or otherwise affect:

(1) the authority granted by law to an executive department or agency, or the head thereof; or

(2) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

BARACK OBAMA.

SUBCHAPTER I—POLICIES AND GOALS

§ 4331. Congressional declaration of national environmental policy

(a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring

and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

(b) In order to carry out the policy set forth in this chapter, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may—

(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;

(3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

(Pub. L. 91–190, title I, §101, Jan. 1, 1970, 83 Stat. 852.)

COMMISSION ON POPULATION GROWTH AND THE AMERICAN FUTURE

Pub. L. 91–213, §§1–9, Mar. 16, 1970, 84 Stat. 67–69, established the Commission on Population Growth and the American Future to conduct and sponsor such studies and research and make such recommendations as might be necessary to provide information and education to all levels of government in the United States, and to our people regarding a broad range of problems associated with population growth and their implications for America's future; prescribed the composition of the Commission; provided for the appointment of its members, and the designation of a Chairman and Vice Chairman; required a majority of the members of the Commission to constitute a quorum, but allowed a lesser number to conduct hearings; prescribed the compensation of members of the Commission; required the Commission to conduct an inquiry into certain prescribed aspects of population growth in the United States and its foreseeable social consequences; provided for the appointment of an Executive Director and other personnel and prescribed their compensation; authorized the Commission to enter into contracts with public agencies, private firms, institutions, and individuals for the conduct of research and surveys, the preparation of reports, and other activities necessary to the discharge of its duties, and to request from any Federal department or agency any information and assistance it deems necessary to carry out its functions; required the General Services Administration to provide administrative services for the Commission on a reimbursable basis; required the Commission to submit an interim report to the President and the Congress one year after it was established and to submit its final report two years after Mar. 16, 1970; terminated the Commission sixty days after the date of the submission of its final report; and authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, such amounts as might be necessary to carry out the provisions of Pub. L. 91–213.

EXECUTIVE ORDER NO. 11507

Ex. Ord. No. 11507, eff. Feb. 4, 1970, 35 F.R. 2573, which related to prevention, control, and abatement of air and water pollution at federal facilities was superseded by Ex. Ord. No. 11752, eff. Dec. 17, 1973, 38 F.R. 34793, formerly set out below.

EXECUTIVE ORDER NO. 11752

Ex. Ord. No. 11752, Dec. 17, 1973, 38 F.R. 34793, which related to the prevention, control, and abatement of environmental pollution at Federal facilities, was revoked by Ex. Ord. No. 12088, Oct. 13, 1978, 43 F.R. 47707, set out as a note under section 4321 of this title.

§ 4332. Cooperation of agencies; reports; availability of information; recommendations; international and national coordination of efforts

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall—

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment;

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by subchapter II of this chapter, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

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(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

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(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment;

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by subchapter II of this chapter, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of title 5, and shall accompany the proposal through the existing agency review processes;

(D) Any detailed statement required under subparagraph (C) after January 1, 1970, for any major Federal action funded under a program of grants to States shall not be deemed to be legally insufficient solely by reason of having been prepared by a State agency or official, if:

(i) the State agency or official has statewide jurisdiction and has the responsibility for such action,

(ii) the responsible Federal official furnishes guidance and participates in such preparation,

(iii) the responsible Federal official independently evaluates such statement prior to its approval and adoption, and

(iv) after January 1, 1976, the responsible Federal official provides early notification to, and solicits the views of, any other State or any Federal land management entity of any action or any alternative thereto which may have significant impacts upon such State or affected Federal land management entity and, if there is any disagreement on such impacts, prepares a written assessment of such impacts and views for incorporation into such detailed statement.

The procedures in this subparagraph shall not relieve the Federal official of his responsibilities for the scope, objectivity, and content of the entire statement or of any other responsibility under this chapter; and further, this subparagraph does not affect the legal sufficiency of statements prepared by State agencies with less than statewide jurisdiction.[1]

(E) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources;

(F) recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment;

(G) make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment;

(H) initiate and utilize ecological information in the planning and development of resource-oriented projects; and

(I) assist the Council on Environmental Quality established by subchapter II of this chapter.

(Pub. L. 91–190, title I, § 102, Jan. 1, 1970, 83 Stat. 853; Pub. L. 94–83, Aug. 9, 1975, 89 Stat. 424.)

AMENDMENTS

1975—Subpars. (D) to (I). Pub. L. 94–83 added subpar. (D) and redesignated former subpars. (D) to (H) as (E) to (I), respectively.

CERTAIN COMMERCIAL SPACE LAUNCH ACTIVITIES

Pub. L. 104–88, title IV, § 401, Dec. 29, 1995, 109 Stat. 955, provided that: ''The licensing of a launch vehicle or launch site operator (including any amendment, extension, or renewal of the license) under [former] chapter 701 of title 49, United States Code [now chapter 509 (§ 50901 et seq.) of Title 51, National and Commercial Space Programs], shall not be considered a major Federal action for purposes of section 102(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(C)) if—

''(1) the Department of the Army has issued a permit for the activity; and

''(2) the Army Corps of Engineers has found that the activity has no significant impact.''

EX. ORD. NO. 13352. FACILITATION OF COOPERATIVE CONSERVATION

Ex. Ord. No. 13352, Aug. 26, 2004, 69 F.R. 52989, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

SECTION 1. *Purpose*. The purpose of this order is to ensure that the Departments of the Interior, Agriculture, Commerce, and Defense and the Environmental Protection Agency implement laws relating to the environment and natural resources in a manner that promotes cooperative conservation, with an emphasis on appropriate inclusion of local participation in Federal decisionmaking, in accordance with their respective agency missions, policies, and regulations.

SEC. 2. *Definition*. As used in this order, the term ''cooperative conservation'' means actions that relate to use, enhancement, and enjoyment of natural resources, protection of the environment, or both, and that involve collaborative activity among Federal, State, local, and tribal governments, private for-profit and nonprofit institutions, other nongovernmental entities and individuals.

SEC. 3. *Federal Activities*. To carry out the purpose of this order, the Secretaries of the Interior, Agriculture, Commerce, and Defense and the Administrator of the Environmental Protection Agency shall, to the extent permitted by law and subject to the availability of appropriations and in coordination with each other as appropriate:

(a) carry out the programs, projects, and activities of the agency that they respectively head that implement laws relating to the environment and natural resources in a manner that:

(i) facilitates cooperative conservation;

(ii) takes appropriate account of and respects the interests of persons with ownership or other legally recognized interests in land and other natural resources;

(iii) properly accommodates local participation in Federal decisionmaking; and

(iv) provides that the programs, projects, and activities are consistent with protecting public health and safety;

[1] So in original. The period probably should be a semicolon.

Council on Environmental Quality Regulations

PART 1500—PURPOSE, POLICY, AND MANDATE

Sec.

AUTHORITY: NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 *et seq.*), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609) and E.O. 11514, Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977).

SOURCE: 43 FR 55990, Nov. 28, 1978, unless otherwise noted.

§ 1500.1 Purpose.

(a) The National Environmental Policy Act (NEPA) is our basic national charter for protection of the environment. It establishes policy, sets goals (section 101), and provides means (section 102) for carrying out the policy. Section 102(2) contains ''action-forcing'' provisions to make sure that federal agencies act according to the letter and spirit of the Act. The regulations that follow implement section 102(2). Their purpose is to tell federal agencies what they must do to comply with the procedures and achieve the goals of the Act. The President, the federal agencies, and the courts share responsibility for enforcing the Act so as to achieve the substantive requirements of section 101.

(b) NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.

(c) Ultimately, of course, it is not better documents but better decisions that count. NEPA's purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. These regulations provide the direction to achieve this purpose.

§ 1500.2 Policy.

Federal agencies shall to the fullest extent possible:

(a) Interpret and administer the policies, regulations, and public laws of the United States in accordance with the policies set forth in the Act and in these regulations.

(b) Implement procedures to make the NEPA process more useful to decisionmakers and the public; to reduce paperwork and the accumulation of extraneous background data; and to emphasize real environmental issues and alternatives. Environmental impact statements shall be concise, clear, and to the point, and shall be supported by evidence that agencies have made the necessary environmental analyses.

(c) Integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively.

(d) Encourage and facilitate public involvement in decisions which affect the quality of the human environment.

(e) Use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.

(f) Use all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment.

§ 1500.3 Mandate.

Parts 1500 through 1508 of this title provide regulations applicable to and binding on all Federal agencies for implementing the procedural provisions of the National Environmental Policy Act of 1969, as amended (Pub. L. 91–190, 42 U.S.C. 4321 *et seq.*) (NEPA or the Act)

(a) Integrating the NEPA process into early planning (§ 1501.2).
(b) Emphasizing interagency cooperation before the environmental impact statement is prepared, rather than submission of adversary comments on a completed document (§ 1501.6).
(c) Insuring the swift and fair resolution of lead agency disputes (§ 1501.5).
(d) Using the scoping process for an early identification of what are and what are not the real issues (§ 1501.7).
(e) Establishing appropriate time limits for the environmental impact statement process (§§ 1501.7(b)(2) and 1501.8).
(f) Preparing environmental impact statements early in the process (§ 1502.5).
(g) Integrating NEPA requirements with other environmental review and consultation requirements (§ 1502.25).
(h) Eliminating duplication with State and local procedures by providing for joint preparation (§ 1506.2) and with other Federal procedures by providing that an agency may adopt appropriate environmental documents prepared by another agency (§ 1506.3).
(i) Combining environmental documents with other documents (§ 1506.4).
(j) Using accelerated procedures for proposals for legislation (§ 1506.8).
(k) Using categorical exclusions to define categories of actions which do not individually or cumulatively have a significant effect on the human environment (§ 1508.4) and which are therefore exempt from requirements to prepare an environmental impact statement.
(l) Using a finding of no significant impact when an action not otherwise excluded will not have a significant effect on the human environment (§ 1508.13) and is therefore exempt from requirements to prepare an environmental impact statement.

§ 1500.6 Agency authority.

Each agency shall interpret the provisions of the Act as a supplement to its existing authority and as a mandate to view traditional policies and missions in the light of the Act's national environmental objectives. Agencies shall review their policies, procedures, and regulations accordingly and revise them as necessary to insure full compliance with the purposes and provisions of the Act. The phrase ''to the fullest extent possible'' in section 102 means that each agency of the Federal Government shall comply with that section unless existing law applicable to the agency's operations expressly prohibits or makes compliance impossible.

PART 1501—NEPA AND AGENCY PLANNING

Sec.

AUTHORITY: NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 *et seq.*), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609, and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977).

SOURCE: 43 FR 55992, Nov. 29, 1978, unless otherwise noted.

§ 1501.1 Purpose.

The purposes of this part include:
(a) Integrating the NEPA process into early planning to insure appropriate consideration of NEPA's policies and to eliminate delay.
(b) Emphasizing cooperative consultation among agencies before the environmental impact statement is prepared rather than submission of adversary comments on a completed document.
(c) Providing for the swift and fair resolution of lead agency disputes.
(d) Identifying at an early stage the significant environmental issues deserving of study and deemphasizing insignificant issues, narrowing the scope of the environmental impact statement accordingly.
(e) Providing a mechanism for putting appropriate time limits on the environmental impact statement process.

repeat any of the discussion in the assessment but may incorporate it by reference.

§ 1508.14 Human environment.

Human environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of ''effects'' (§ 1508.8).) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.

§ 1508.15 Jurisdiction by law.

Jurisdiction by law means agency authority to approve, veto, or finance all or part of the proposal.

§ 1508.16 Lead agency.

Lead agency means the agency or agencies preparing or having taken primary responsibility for preparing the environmental impact statement.

§ 1508.17 Legislation.

Legislation includes a bill or legislative proposal to Congress developed by or with the significant cooperation and support of a Federal agency, but does not include requests for appropriations. The test for significant cooperation is whether the proposal is in fact predominantly that of the agency rather than another source. Drafting does not by itself constitute significant cooperation. Proposals for legislation include requests for ratification of treaties. Only the agency which has primary responsibility for the subject matter involved will prepare a legislative environmental impact statement.

§ 1508.18 Major Federal action.

Major Federal action includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly (§ 1508.27). Actions include the circumstance where the responsible officials fail to act and that failure to act is reviewable by courts or administrative tribunals under the Administrative Procedure Act or other applicable law as agency action.

(a) Actions include new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies; new or revised agency rules, regulations, plans, policies, or procedures; and legislative proposals (§§ 1506.8, 1508.17). Actions do not include funding assistance solely in the form of general revenue sharing funds, distributed under the State and Local Fiscal Assistance Act of 1972, 31 U.S.C. 1221 *et seq.*, with no Federal agency control over the subsequent use of such funds. Actions do not include bringing judicial or administrative civil or criminal enforcement actions.

(b) Federal actions tend to fall within one of the following categories:

(1) Adoption of official policy, such as rules, regulations, and interpretations adopted pursuant to the Administrative Procedure Act, 5 U.S.C. 551 *et seq.;* treaties and international conventions or agreements; formal documents establishing an agency's policies which will result in or substantially alter agency programs.

(2) Adoption of formal plans, such as official documents prepared or approved by federal agencies which guide or prescribe alternative uses of Federal resources, upon which future agency actions will be based.

(3) Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive.

(4) Approval of specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as federal and federally assisted activities.

§ 1508.19 Matter.

Matter includes for purposes of part 1504:

consequencies together, such as common timing or geography. An agency may wish to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement.

(b) Alternatives, which include:

(1) No action alternative.

(2) Other reasonable courses of actions.

(3) Mitigation measures (not in the proposed action).

(c) Impacts, which may be: (1) Direct; (2) indirect; (3) cumulative.

§ 1508.26 Special expertise.

Special expertise means statutory responsibility, agency mission, or related program experience.

§ 1508.27 Significantly.

Significantly as used in NEPA requires considerations of both context and intensity:

(a) *Context.* This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

(b) *Intensity.* This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

(2) The degree to which the proposed action affects public health or safety.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

[43 FR 56003, Nov. 29, 1978; 44 FR 874, Jan. 3, 1979]

§ 1508.28 Tiering.

Tiering refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement

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the protection of migratory birds, the Bureau shall require an Environmental Assessment for an otherwise categorically excluded action involving a new or existing antenna structure, for which an antenna structure registration application (FCC Form 854) is required under part 17 of this chapter, if the proposed antenna structure will be over 450 feet in height above ground level (AGL) and involves either:

1. Construction of a new antenna structure;

2. Modification or replacement of an existing antenna structure involving a substantial increase in size as defined in paragraph I(C)(1)(3) of Appendix B to part 1 of this chapter; or

3. Addition of lighting or adoption of a less preferred lighting style as defined in §17.4(c)(1)(iii) of this chapter. The Bureau shall consider whether to require an EA for other antenna structures subject to §17.4(c) of this chapter in accordance with §17.4(c)(8) of this chapter. An Environmental Assessment required pursuant to this note will be subject to the same procedures that apply to any Environmental Assessment required for a proposed tower or modification of an existing tower for which an antenna structure registration application (FCC Form 854) is required, as set forth in §17.4(c) of this chapter.

(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.

[51 FR 15000, Apr. 22, 1986]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §1.1307, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov*.

§1.1308 Consideration of environmental assessments (EAs); findings of no significant impact.

(a) Applicants shall prepare EAs for actions that may have a significant environmental impact (*see* §1.1307). An EA is described in detail in §1.1311 of this part of the Commission rules.

(b) The EA is a document which shall explain the environmental consequences of the proposal and set forth sufficient analysis for the Bureau or the Commission to reach a determination that the proposal will or will not have a significant environmental effect. To assist in making that determination, the Bureau or the Commission may request further information from the applicant, interested persons, and agencies and authorities which have jurisdiction by law or which have relevant expertise.

NOTE: With respect to actions specified under §1.1307 (a)(3) and (a)(4), the Commission shall solicit and consider the comments of the Department of Interior, and the State Historic Preservation Officer and the Advisory Council on Historic Preservation, respectively, in accordance with their established procedures. *See* Interagency Cooperation—Endangered Species Act of 1973, as amended, 50 CFR part 402; Protection of Historic and Cultural Properties, 36 CFR part 800. In addition, when an action interferes with or adversely affects an American Indian tribe's religious site, the Commission shall solicit the views of that American Indian tribe. *See* §1.1307(a)(5).

(c) If the Bureau or the Commission determines, based on an independent review of the EA and any applicable mandatory consultation requirements imposed upon Federal agencies (*see* note above), that the proposal will have a significant environmental impact upon the quality of the human environment, it will so inform the applicant. The applicant will then have an opportunity to amend its application

so as to reduce, minimize, or eliminate environmental problems. *See* §1.1309. If the environmental problem is not eliminated, the Bureau will publish in the FEDERAL REGISTER a Notice of Intent (*see* §1.1314) that EISs will be prepared (*see* §§1.1315 and 1.1317), or

(d) If the Bureau or Commission determines, based on an independent review of the EA, and any mandatory consultation requirements imposed upon Federal agencies (*see* the note to paragraph (b) of this section), that the proposal would not have a significant impact, it will make a finding of no significant impact. Thereafter, the application will be processed without further documentation of environmental effect. Pursuant to CEQ regulations, *see* 40 CFR 1501.4 and 1501.6, the applicant must provide the community notice of the Commission's finding of no significant impact.

[51 FR 15000, Apr. 22, 1986; 51 FR 18889, May 23, 1986, as amended at 53 FR 28394, July 28, 1988]

§1.1309 Application amendments.

Applicants are permitted to amend their applications to reduce, minimize or eliminate potential environmental problems. As a routine matter, an applicant will be permitted to amend its application within thirty (30) days after the Commission or the Bureau informs the applicant that the proposal will have a significant impact upon the quality of the human environment (*see* §1.1308(c)). The period of thirty (30) days may be extended upon a showing of good cause.

§1.1310 Radiofrequency radiation exposure limits.

(a) Specific absorption rate (SAR) shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in §1.1307(b) within the frequency range of 100 kHz to 6 GHz (inclusive).

(b) The SAR limits for occupational/controlled exposure are 0.4 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 8 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit for occupational/controlled exposure is 20 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 6 minutes to determine compliance with occupational/controlled SAR limits.

(c) The SAR limits for general population/uncontrolled exposure are 0.08 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 1.6 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 30 minutes to determine compliance with general population/uncontrolled SAR limits.

(d)(1) Evaluation with respect to the SAR limits in this section and in §2.1093 of this chapter must demonstrate compliance with both the whole-body and peak spatial-average limits using technically supportable methods and exposure conditions in advance of authorization (licensing or equipment certification) and in a manner that permits independent assessment.

(2) At operating frequencies less than or equal to 6 GHz, the limits for maximum permissible exposure (MPE), derived from whole-body SAR limits and listed in Table 1 of paragraph (e) of this section, may be used instead of whole-body SAR limits as set forth in paragraph (a) through (c) of this section to evaluate the environmental impact of human exposure to RF radiation as specified in §1.1307(b), except for portable devices as defined in §2.1093 as these evaluations shall be performed according to the SAR provisions in §2.1093 of this chapter.

(3) At operating frequencies above 6 GHz, the MPE limits shall be used in all cases to evaluate the environmental impact of human exposure to RF radiation as specified in §1.1307(b).

(4) Both the MPE limits listed in Table 1 of paragraph (e) of this section and the SAR limits as set forth in paragraph (a) through (c) of this section and in §2.1093 of this chapter are for continuous exposure, that is, for indefinite time periods. Exposure levels higher than the limits are permitted for shorter exposure times, as long as the average exposure over the specified averaging time in Table 1 is less than the limits. Detailed information on our policies regarding procedures for evaluating compliance with all of these exposure limits can be found in the FCC's *OET Bulletin 65*, ''Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields,'' and in supplements to *Bulletin 65*, all available at the FCC's Internet Web site: *http://www.fcc.gov/oet/rfsafety*.

Note to paragraphs (a) through (d): SAR is a measure of the rate of energy absorption due to exposure to RF electromagnetic energy. The SAR limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized SAR in §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 Std C95.1–1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. The 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, §17.4.5, copyright 1986 by NCRP, Bethesda, Maryland 20814. Limits for whole body SAR and peak spatial-average SAR are based on recommendations made in both of these documents. The MPE limits in Table 1 are based generally on criteria published by the NCRP in ''Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,'' NCRP Report No. 86, §§17.4.1, 17.4.1.1, 17.4.2 and 17.4.3, copyright 1986 by NCRP, Bethesda, Maryland 20814. In the frequency range from 100 MHz to 1500 MHz, these MPE exposure limits for field strength and power density are also generally based on criteria recommended by the ANSI in §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 Std C95.1–1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017.

(e) Table 1 below sets forth limits for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields.

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^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3–3.0	614	1.63	*100	6
3.0–30	1842/f	4.89/f	$*900/f^2$	6
30–300	61.4	0.163	1.0	6
300–1,500			f/300	6
1,500–100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*100	30
1.34–30	824/f	2.19/f	$*180/f^2$	30
30–300	27.5	0.073	0.2	30
300–1,500			f/1500	30
1,500–100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

(1) Occupational/controlled exposure 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 a person is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure. The phrase *fully aware* in the context of applying these exposure limits means that an exposed person has received written and/or verbal information fully explaining the potential for RF exposure resulting from his or her employment. With the exception of *transient* persons, this phrase also means that an exposed person has received appropriate training regarding work practices relating to controlling or mitigating his or her exposure. Such training is not required for *transient* persons, but they must receive written and/or verbal information and notification (for example, using signs) concerning their exposure potential and appropriate means available to mitigate their exposure. The phrase *exercise control* means that an exposed person is allowed to and knows how to reduce or avoid exposure by administrative or engineering controls and work practices, such as use of personal protective equipment or time averaging of exposure.

(2) General population/uncontrolled exposure limits apply in situations in which the general public may be exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

(3) Licensees and applicants are responsible for compliance with both the occupational/controlled exposure limits and the general population/uncontrolled exposure limits as they apply to transmitters under their jurisdiction. Licensees and applicants should be aware that the occupational/controlled exposure limits apply especially in situations where workers may have access to areas in very close proximity to antennas and access to the general public may be restricted.

(4) In lieu of evaluation with the general population/uncontrolled exposure limits, amateur licensees authorized under part 97 of this chapter and members of his or her immediate household may be evaluated with respect to the occupational/controlled exposure limits in this section, provided appropriate training and information has been provided to the amateur licensee and members of his/her household. Other nearby persons who are not members of the amateur licensee's household must be evaluated with respect to the general population/uncontrolled exposure limits.

[78 FR 33650, June 4, 2013]

§ 1.1311 Environmental information to be included in the environmental assessment (EA).

(a) The applicant shall submit an EA with each application that is subject to environmental processing (*see* § 1.1307). The EA shall contain the following information:

(1) For antenna towers and satellite earth stations, a description of the facilities as well as supporting structures and appurtenances, and a description of the site as well as the surrounding area and uses. If high intensity white lighting is proposed or utilized within a residential area, the EA must also address the impact of this lighting upon the residents.

(2) A statement as to the zoning classification of the site, and communications with, or proceedings before and determinations (if any) made by zoning, planning, environmental or other local, state or Federal authorities on matters relating to environmental effect.

(3) A statement as to whether construction of the facilities has been a source of controversy on environmental grounds in the local community.

(4) A discussion of environmental and other considerations which led to the selection of the particular site and, if relevant, the particular facility; the nature and extent of any unavoidable adverse environmental effects, and any alternative sites or facilities which have been or might reasonably be considered.

(5) Any other information that may be requested by the Bureau or Commission.

(6) If endangered or threatened species or their critical habitats may be affected, the applicant's analysis must

utilize the best scientific and commercial data available, *see* 50 CFR 402.14(c).

(b) The information submitted in the EA shall be factual (not argumentative or conclusory) and concise with sufficient detail to explain the environmental consequences and to enable the Commission or Bureau, after an independent review of the EA, to reach a determination concerning the proposal's environmental impact, if any. The EA shall deal specifically with any feature of the site which has special environmental significance (e.g., wilderness areas, wildlife preserves, natural migration paths for birds and other wildlife, and sites of historic, architectural, or archeological value). In the case of historically significant sites, it shall specify the effect of the facilities on any district, site, building, structure or object listed, or eligible for listing, in the National Register of Historic Places. It shall also detail any substantial change in the character of the land utilized (e.g., deforestation, water diversion, wetland fill, or other extensive change of surface features). In the case of wilderness areas, wildlife preserves, or other like areas, the statement shall discuss the effect of any continuing pattern of human intrusion into the area (e.g., necessitated by the operation and maintenance of the facilities).

(c) The EA shall also be accompanied with evidence of site approval which has been obtained from local or Federal land use authorities.

(d) To the extent that such information is submitted in another part of the application, it need not be duplicated in the EA, but adequate cross-reference to such information shall be supplied.

(e) An EA need not be submitted to the Commission if another agency of the Federal Government has assumed responsibility for determining whether of the facilities in question will have a significant effect on the quality of the human environment and, if it will, for invoking the environmental impact statement process.

[51 FR 15000, Apr. 22, 1986, as amended at 51 FR 18889, May 23, 1986; 53 FR 28394, July 28, 1988]

§ 1.1312 Facilities for which no preconstruction authorization is required.

(a) In the case of facilities for which no Commission authorization prior to construction is required by the Commission's rules and regulations the licensee or applicant shall initially ascertain whether the proposed facility may have a significant environmental impact as defined in § 1.1307 of this part or is categorically excluded from environmental processing under § 1.1306 of this part.

(b) If a facility covered by paragraph (a) of this section may have a significant environmental impact, the information required by § 1.1311 of this part shall be submitted by the licensee or applicant and ruled on by the Commission, and environmental processing (if invoked) shall be completed, see § 1.1308 of this part, prior to the initiation of construction of the facility.

(c) If a facility covered by paragraph (a) of this section is categorically excluded from environmental processing, the licensee or applicant may proceed with construction and operation of the facility in accordance with the applicable licensing rules and procedures.

(d) If, following the initiation of construction under this section, the licensee or applicant discovers that the proposed facility may have a significant environmental effect, it shall immediately cease construction which may have that effect, and submit the information required by § 1.1311 of this part. The Commission shall rule on that submission and complete further environmental processing (if invoked), see § 1.1308 of this part, before such construction is resumed.

(e) Paragraphs (a) through (d) of this section shall not apply:

(1) To the construction of mobile stations; or

(2) Where the deployment of facilities meets the following conditions:

(i) The facilities are mounted on structures 50 feet or less in height including their antennas as defined in § 1.1320(d), or the facilities are mounted on structures no more than 10 percent taller than other adjacent structures, or the facilities do not extend existing structures on which they are located to a height of more than 50 feet or by

more than 10 percent, whichever is greater;

(ii) Each antenna associated with the deployment, excluding the associated equipment (as defined in the definition of antenna in §1.1320(d)), is no more than three cubic feet in volume;

(iii) All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume; and

(iv) The facilities do not require antenna structure registration under part 17 of this chapter; and

(v) The facilities are not located on tribal lands, as defined under 36 CFR 800.16(x); and

(vi) The facilities do not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1307(b).

[55 FR 20396, May 16, 1990, as amended at 56 FR 13414, Apr. 2, 1991; 83 FR 19458, May 3, 2018]

§1.1313 Objections.

(a) In the case of an application to which section 309(b) of the Communications Act applies, objections based on environmental considerations shall be filed as petitions to deny.

(b) Informal objections which are based on environmental considerations must be filed prior to grant of the construction permit, or prior to authorization for facilities that do not require construction permits, or pursuant to the applicable rules governing services subject to lotteries.

§1.1314 Environmental impact statements (EISs).

(a) Draft Environmental Impact Statements (DEISs) (§1.1315) and Final Environmental Impact Statements (FEISs) (referred to collectively as EISs) (§1.1317) shall be prepared by the Bureau responsible for processing the proposal when the Commission's or the Bureau's analysis of the EA (§1.1308) indicates that the proposal will have a significant effect upon the environment and the matter has not been resolved by an amendment.

(b) As soon as practically feasible, the Bureau will publish in the FEDERAL REGISTER a Notice of Intent to prepare EISs. The Notice shall briefly identify the proposal, concisely describe the environmental issues and concerns presented by the subject application, and generally invite participation from affected or involved agencies, authorities and other interested persons.

(c) The EISs shall not address nonenvironmental considerations. To safeguard against repetitive and unnecessarily lengthy documents, the Statements, where feasible, shall incorporate by reference material set forth in previous documents, with only a brief summary of its content. In preparing the EISs, the Bureau will identify and address the significant environmental issues and eliminate the insignificant issues from analysis.

(d) To assist in the preparation of the EISs, the Bureau may request further information from the applicant, interested persons and agencies and authorities, which have jurisdiction by law or which have relevant expertise. The Bureau may direct that technical studies be made by the applicant and that the applicant obtain expert opinion concerning the potential environmental problems and costs associated with the proposed action, as well as comparative analyses of alternatives. The Bureau may also consult experts in an effort to identify measures that could be taken to minimize the adverse effects and alternatives to the proposed facilities that are not, or are less, objectionable. The Bureau may also direct that objections be raised with appropriate local, state or Federal land use agencies or authorities (if their views have not been previously sought).

(e) The Bureau responsible for processing the particular application and, thus, preparing the EISs shall draft supplements to Statements where significant new circumstances occur or information arises relevant to environmental concerns and bearing upon the application.

(f) The Application, the EA, the DEIS, and the FEIS and all related documents, including the comments filed by the public and any agency, shall be part of the administrative record and will be routinely available for public inspection.