

# ROBINSON & COLE LLP

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Kenneth C. Baldwin  
860-275-8345  
kbaldwin@rc.com

October 31, 2001

Mr. Joel M. Rinebold  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051



Re: **Request of Northcoast Communications, LLC for an Order to Approve the Shared Use of a Tower Facility at 200 Stanley Street, New Britain, Connecticut**

Dear Mr. Rinebold:

Pursuant to Connecticut General Statutes §16-50aa, as amended, Northcoast Communications, LLC (“Northcoast”) hereby requests an order from the Connecticut Siting Council (“Council”) to approve the proposed shared use by Northcoast of an existing Crown Atlantic Company (“Crown”) tower located at 200 Stanley Street in New Britain, Connecticut. Northcoast requests that the Council find that the proposed shared use of the tower satisfies the criteria stated in Connecticut General Statutes § 16-50aa and issue an order approving the proposed use.

## **Background**

The Crown tower at 200 Stanley Street was constructed pursuant to approvals from the City of New Britain. The tower is a 195-foot monopole structure within a 50’ by 70’ facility compound.

Northcoast is licensed by the Federal Communications Commission (FCC) to provide wireless personal communications service (“PCS”) in the State of Connecticut, which includes the area to be served by Northcoast’s proposed New Britain installation. Northcoast and Crown have agreed to the proposed shared use of this tower pursuant to mutually acceptable terms and conditions.

Northcoast proposes to install six (6) panel-type antennas and three (3) approximately 2-foot microwave dish antennas at the 185-foot level on the tower. The radio transmission equipment associated with these panel and dish antennas would be located on a 10' by 20' concrete pad to be installed near the base of the tower.

## **Discussion**

C.G.S. § 16-50aa(c)(1) provides that, upon written request for approval of a proposed shared use, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns, the council shall issue an order approving such shared use." The shared use of the tower satisfies those criteria as follows:

**A. Technical Feasibility.** The existing tower is structurally capable of supporting the proposed Northcoast antennas. A letter from URS Corp. confirming the structural capability of the existing tower is attached to this filing. The proposed shared use of this tower therefore is technically feasible.

**B. Legal Feasibility.** Under C.G.S. § 16-50aa, the Council has been authorized to issue orders approving the proposed shared use of an existing tower facility such as the facility at 200 Stanley Street in New Britain. This authority complements the Council's prior-existing authority under C.G.S. § 16-50p to issue orders approving the construction of new towers that are subject to the Council's jurisdiction. In addition, § 16-50x(a) directs the Council to "give such consideration to other state laws and municipal regulations as it shall deem appropriate" in ruling on requests for the shared use of existing towers facilities. Under the statutory authority vested in the Council, an order by the Council approving the requested shared use would permit Northcoast to obtain a building permit for the proposed installation.

**C. Environmental Feasibility.** The proposed shared use would have a minimal environmental effect, for the following reasons:

1. The proposed installation would have an insignificant incremental visual impact, and would not cause any significant change or alteration in the physical or environmental characteristics of the existing site. In particular, the proposed installation would not increase the height of the existing tower, and would not extend the boundaries of the tower site outside the limits of the existing site compound.
2. The proposed installation would not increase the noise levels at the existing facility by six decibels or more.

3. Operation of Northcoast antennas at this site would not exceed the total radio frequency (RF) electromagnetic radiation power density level adopted by the Federal Communications Commission. The "worst-case" exposure calculated for operation of this facility (i.e., calculated at the base of the tower) would be approximately  $0.0108 \text{ mW/cm}^2$  (1.082% of the standard) for Northcoast panel antennas and approximately  $0.0000016742 \text{ mW/cm}^2$ , (0.0002% of the applicable standard) for the microwave dish antennas, for a total of 1.082% of the standard as measured for mixed frequency sites.
4. The proposed installation would not require any water or sanitary facilities, or generate air emissions or discharges to water bodies. After construction is complete, the proposed installation would not generate any traffic other than for periodic maintenance visits.

The proposed use of this facility would therefore have a minimal environmental effect, and is environmentally feasible.

**E. Economic Feasibility.** As previously mentioned, Northcoast and Crown have entered into a mutual agreement to share the use of the tower on terms agreeable to the parties. The proposed tower sharing is therefore economically feasible.

**F. Public Safety Concerns.** As stated above, the tower is structurally capable of supporting the Northcoast antennas and dishes. Northcoast is not aware of any public safety concerns relative to the proposed sharing of the existing tower. In fact, the provision of new or improved wireless communications service through shared use of the existing tower is expected to enhance the safety and welfare of area residents.

## **Conclusion**

For the reasons discussed above, the proposed shared use of the existing tower at 200 Stanley Street in New Britain, Connecticut satisfies the criteria stated in C.G.S. § 16-50aa and advances the General Assembly's and the Siting Council's goal of preventing the proliferation of towers in Connecticut. Northcoast therefore requests that the Siting Council issue an order approving the proposed shared use.

# ROBINSON & COLE LLP

Joel M. Rinebold

October 31, 2001

Page 4

Thank you for your consideration of this matter.

Very truly yours,

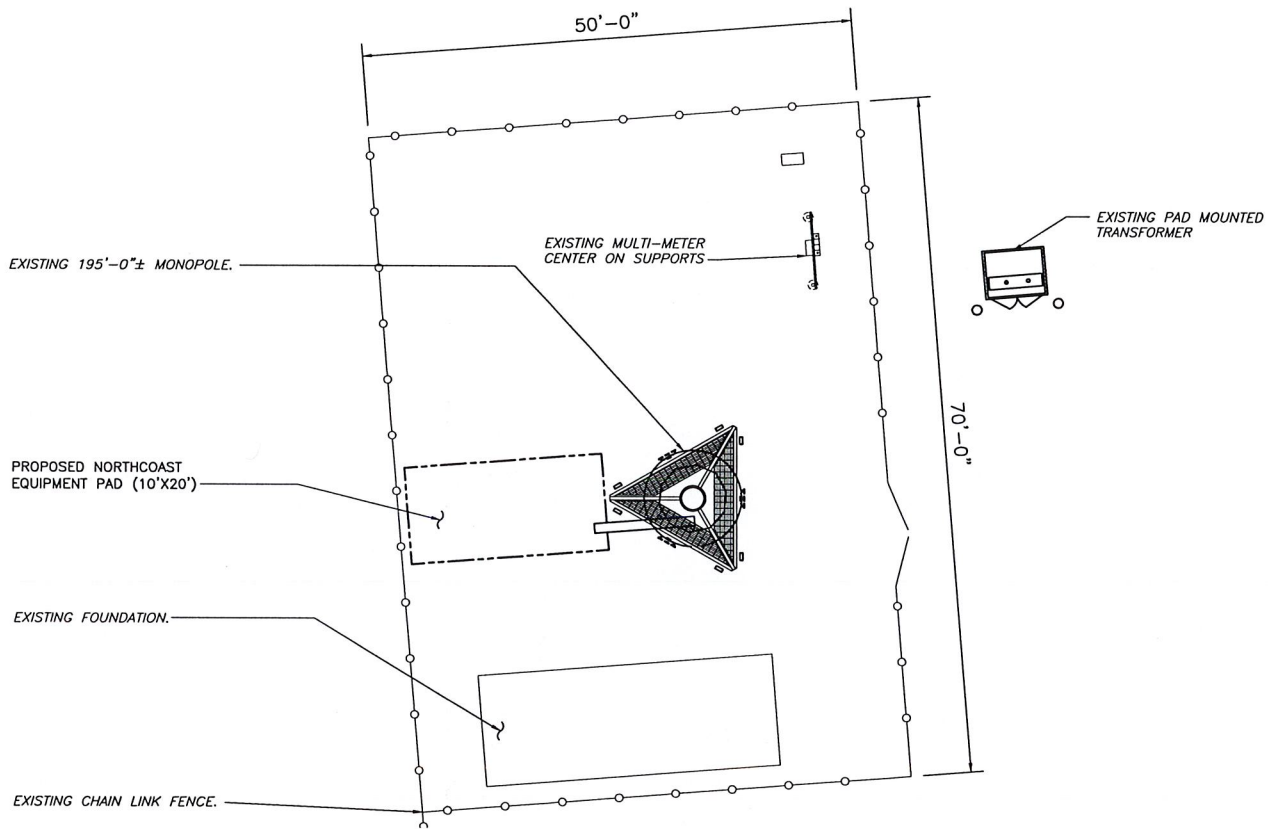
A handwritten signature in blue ink, appearing to read "Kenneth C. Baldwin", with a long horizontal flourish extending to the right.

Kenneth C. Baldwin

KCB/kmd

Attachments

cc: Honorable Lucian J. Pawlak, Mayor  
Jennifer Young Gaudet



**1** SITE PLAN  
 SC-1 SCALE: 1" = 20'-0"

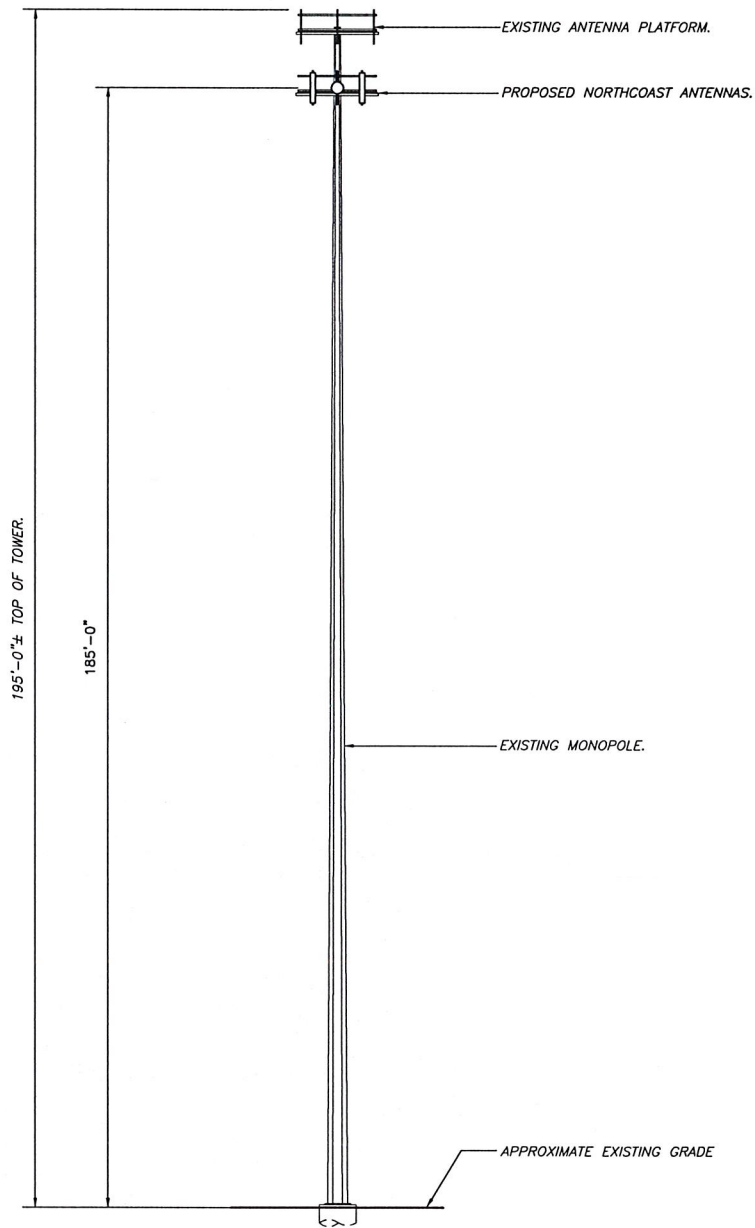


**URS**  
 URS CORPORATION-CT  
 795 BROOK STREET, BLDG 5  
 ROCKY HILL, CT. 06067  
 1-(860)-529-8882  
 URS JOB NO.:F302105.42

**Northcoast Communications, L.L.C.**  
 80 BAYLIS ROAD, SUITE 201, MELVILLE, NY 11747

TITLE: 184.020.1.1C SITING COUNCIL	ADDRESS: 200 STANLEY STREET NEW BRITAIN, CT 06050-1508	OWNER: CROWN CASTLE 500 WEST CUMMINGS PARK, SUITE 3400 WOBURN, MA 01801
--	--	---

SCALE: AS NOTED	DRAWN BY: RR
DATE ISSUED: 10/29/01	CHECKED BY: FTT
REV.	APPROVED BY: ICA
Dwg. No.	<b>SC-1</b>
Dwg. 1 of 2	



1 MONOPOLE ELEVATION  
 SC-2 SCALE: 1/32" = 1'-0"



**URS**  
 URS CORPORATION-CT  
 795 BROOK STREET, BLDG 5  
 ROCKY HILL, CT. 06067  
 1-(866)-529-8882  
 URS JOB NO.:F302105.42

**Northcoast Communications, L.L.C.**  
 80 BAYLIS ROAD, SUITE 201, MELVILLE, NY 11747

TITLE:  
 184.020.1.1C  
 SITING COUNCIL

ADDRESS:  
 200 STANLEY STREET  
 NEW BRITAIN, CT 06050-1508

OWNER:  
 CROWN CASTLE  
 500 WEST CUMMINGS PARK,  
 SUITE 3400  
 WOBURN, MA 01801

SCALE: AS NOTED	DRAWN BY : RR
DATE ISSUED: 10/29/01	CHECKED BY: FTT
REV.	APPROVED BY: ICA
	Dwg. No.
	<b>SC-2</b>
	Dwg. 2 of 2



October 30, 2001

Mr. Mortimer A. Gelston  
Chairman  
Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051

**Reference: Proposed Telecommunications Facility  
Northcoast Site No.: 184.020.1.1C  
200 Stanley Street  
New Britain, Connecticut  
F300002105.42**


Dear Mr. Gelston:

URS has performed a review and evaluated the structural design for the 195' monopole tower located at 200 Stanley Street in New Britain, Connecticut. The monopole and its foundation were designed by Paul J. Ford Company, File No.: 29201-0441. The tower was designed to support five carriers and two microwave dishes. The tower is currently supporting one carrier at 195' and an empty low profile platform (no antennas) at 185'. It is our determination that the tower will support the existing antennas at 195' and the proposed Northcoast antennas at 185' provided each carrier maintains a maximum of 75 square feet of antenna area and required force coefficients. This evaluation was performed to the requirements of EIA/TIA-222-F.

If you should have any questions, please call

Sincerely,

**URS Corporation AES**

  
Mohsen Sahirad, P.E.  
Senior Structural Engineer



MS/mks

cc: Jennifer Gaudet - Pinnacle  
Christopher McCarrier - Pinnacle  
Ignacio C. Artaiz, AIA - URS  
Douglas J. Roberts, AIA - URS  
Alitz Abadjian, PM - URS  
CF/Book



TS-Northcoast-089-011031 200 Stanley Street New Britain 11/15/01



Jennifer Young Gaudet  
7 Sycamore Street  
Glastonbury, CT 06033  
Tel: (860) 657-1460 Portable: (860) 798-7454  
Fax: (860) 652-8333

**PINNACLE  
SITE DEVELOPMENT**

**Fax**



**To:** Bob Mercier **From:** Jennifer Gaudet  
**Fax:** 860 827-2950 **Pages:** 13  
**Phone:** **Date:** 11/1/2001  
**Re:** Northcoast power density **CC:**

**Urgent**     **For Review**     **Please Comment**     **Please Reply**     **Please Recycle**

• **Comments:**

Bob -

Per your discussion with Dan Goulet, et al. from Atlantic Western. Please let me know if you have any additional questions.

Jennifer

The information contained in this facsimile message is privileged and confidential information intended for the use of the addressee listed above and no one else. If you are not the intended recipient please contact the sender by telephone immediately.

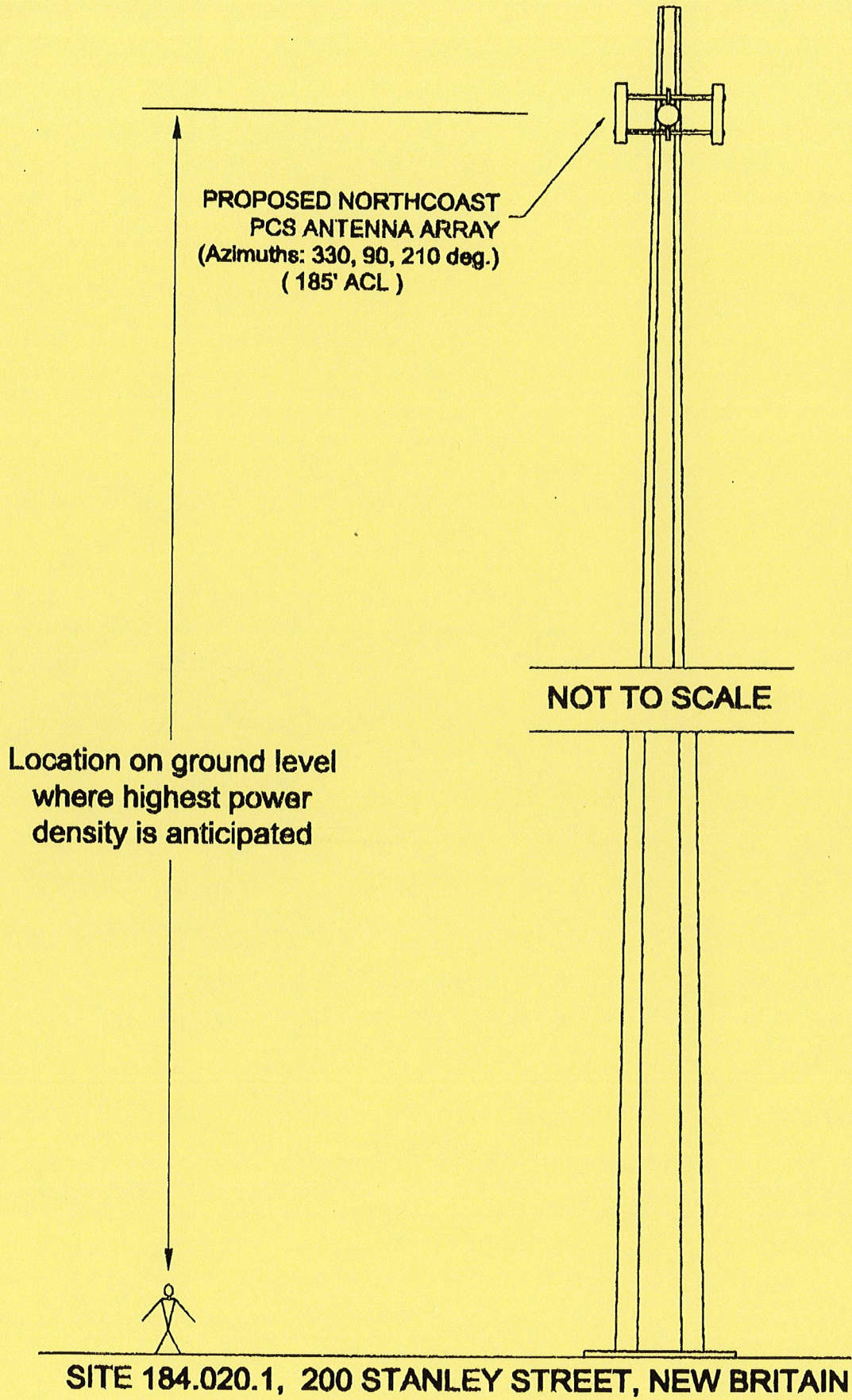
**Electromagnetic Energy (EME):**

Our analysis of the Site shows that the radio frequency exposure levels to be generated by the Proposed Facility are substantially below the applicable health and safety standards established by the Federal Communications Commission ("FCC").

In accordance with FCC/EPA guidelines and limits for human exposure put forth in NEPA rules Title 47, Part L, Section 1.1307 and 1.1310, an analysis was performed at the base of the tower. This analysis calculated the combined Maximum Permissible Exposure (MPE) from transmitters currently in operation at the site along with any proposed transmitters. Worst-case scenarios were used whenever possible including the assumption that all transmitters point directly at the ground. The results of our calculations presented in Table 1 show that the collective %MPE at the base of the tower is 1.082 %. This value is far below the 100% MPE limit for General Population/Uncontrolled, and therefore is compliant with the FCC rules for human exposure. The FCC exposure guidelines and limits are attached in Appendix A, and all calculations and assumptions are shown below.

Note: Analysis of the proposed microwave dishes was performed and found to be negligible in comparison with power densities resulting from PCS applications. For example, microwave power density at the base of the tower for this site is  $0.0000016742 \text{ mw/cm}^2$ , which equates to 0.00016742 % MPE. For this reason, these values are not represented in Table 1.

A site layout drawing of the proposed equipment can be seen on the following page.



**Table 1 Calculated Power Density and %MPE**

CARRIER NAME	Radiating Centerline of Antennas (ft)	Radial distance from source (m)	Vertical Gain (dBd)	E.I.R.P. (Watts)	Power Density S ( $\mu\text{W}/\text{cm}^2$ )	Power Density Limits Slim ( $\mu\text{W}/\text{cm}^2$ )	% MPE
Northcoast PCS	185.0	54.6	-0.2	1580.801	10.8186	1000.0	1.082

Total %MPE at Base of Tower = 1.082%

Assumptions used to determine the values listed in Table 1

- The wave reflecting off the ground would add linearly, unattenuated and in phase with the wave arriving directly from the antenna (a worst-case condition).
- There are no obstructions to attenuate the signal broadcast from the antenna to ground level.
- The maximum signal levels will be realized in the direction of the sector antenna.
- Typical antenna models were used for each carrier.
- Calculations are based on human height of 6 feet.
- All calculations are performed at base of tower.

Calculations used to determine the values listed in Table 1

From the FCC Office of Science and Technology (OST) Bulletin #65 Edition 97-01 dated August 1997, the power density (S) can be predicted as follows:

$$S = \frac{2.56 \times \text{EIRP}}{4 \times \text{Pi} \times R^2} (\mu\text{W}/\text{cm}^2)$$

Where:

$$\text{EIRP} = P + G + C$$

P = Power to antenna.

G = Gain of antenna.

C = Cable loss

R = Radial distance from source.

Pi = 3.1415

The calculation for Percentage Maximum Permissible Exposure:

$$\%MPE = (S / S_{lim}) * 100$$

Where:

S = Calculated Power Density

$S_{lim}$  = FCC Power Density Limit for Maximum Permissible Exposure to Public

## Appendix A- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

(Reference Table 1. Title 47 CFR)

### (A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

### (B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

\*Plane-wave equivalent power density

NOTE 1: *Occupational/controlled* limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

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

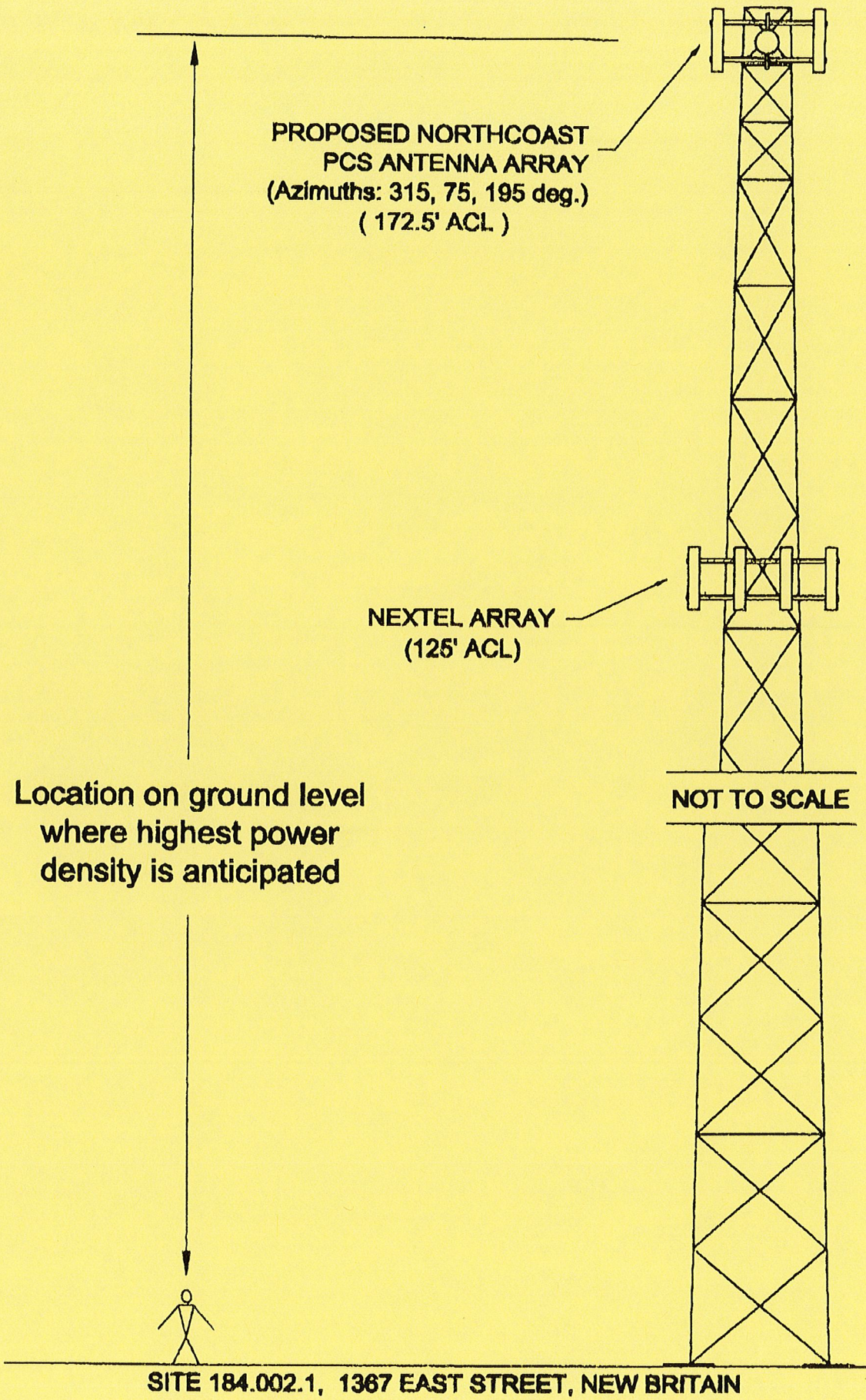
**Electromagnetic Energy (EME):**

Our analysis of the Site shows that the radio frequency exposure levels to be generated by the Proposed Facility are substantially below the applicable health and safety standards established by the Federal Communications Commission ("FCC").

In accordance with FCC/EPA guidelines and limits for human exposure put forth in NEPA rules Title 47, Part L, Section 1.1307 and 1.1310, an analysis was performed at the base of the tower. This analysis calculated the combined Maximum Permissible Exposure (MPE) from transmitters currently in operation at the site along with any proposed transmitters. Worst-case scenarios were used whenever possible including the assumption that all transmitters point directly at the ground. The results of our calculations presented in Table 1 show that the collective %MPE at the base of the tower is 4.966%. This value is far below the 100% MPE limit for General Population/Uncontrolled, and therefore is compliant with the FCC rules for human exposure. The FCC exposure guidelines and limits are attached in Appendix A, and all calculations and assumptions are shown below.

Note: Analysis of the proposed microwave dishes was performed and found to be negligible in comparison with power densities resulting from PCS applications. For example, microwave power density at the base of the tower for this site is  $0.0000013127 \text{ mw/cm}^2$ , which equates to 0.00013127 % MPE. For this reason, these values are not represented in Table 1.

A site layout drawing of the proposed equipment can be seen on the following page.



**Table 1 Calculated Power Density and %MPE**

CARRIER NAME	Radiating Centerline of Antennas (ft)	Radial distance from source (m)	Vertical Gain (dBd)	E.I.R.P. (Watts)	Power Density S ( $\mu\text{W}/\text{cm}^2$ )	Power Density Limits Slim ( $\mu\text{W}/\text{cm}^2$ )	% MPE
Northcoast PCS	172.5	50.7	-0.2	1580.801	12.5040	1000.0	1.250
Nextel Communications	125.0	36.3	0.0	1360.566	21.0681	567.3	3.716

Total %MPE at Base of Tower = 4.966%

Assumptions used to determine the values listed in Table 1

- a. The wave reflecting off the ground would add linearly, unattenuated and in phase with the wave arriving directly from the antenna (a worst-case condition).
- b. There are no obstructions to attenuate the signal broadcast from the antenna to ground level.
- c. The maximum signal levels will be realized in the direction of the sector antenna.
- d. Typical antenna models were used for each carrier.
- e. Calculations are based on human height of 6 feet.
- f. All calculations are performed at base of tower.

Calculations used to determine the values listed in Table 1

From the FCC Office of Science and Technology (OST) Bulletin #65 Edition 97-01 dated August 1997, the power density (S) can be predicted as follows:

$$S = \frac{2.56 \times \text{EIRP}}{4 \times \text{Pi} \times R^2} \text{ (}\mu\text{W}/\text{cm}^2\text{)}$$

- Where:
- EIRP = P + G + C
  - P = Power to antenna.
  - G = Gain of antenna.
  - C = Cable loss
  - R = Radial distance from source.
  - Pi = 3.1415

The calculation for Percentage Maximum Permissible Exposure:

$$\%MPE = (S / S_{lim}) * 100$$

- Where:
- S = Calculated Power Density
  - S<sub>lim</sub> = FCC Power Density Limit for Maximum Permissible Exposure to Public



## Appendix A- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) (Reference Table 1. Title 47 CFR)

### (A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

### (B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

\*Plane-wave equivalent power density

NOTE 1: *Occupational/controlled* limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

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

**Electromagnetic Energy (EME):**

Our analysis of the Site shows that the radio frequency exposure levels to be generated by the Proposed Facility are substantially below the applicable health and safety standards established by the Federal Communications Commission ("FCC").

In accordance with FCC/EPA guidelines and limits for human exposure put forth in NEPA rules Title 47, Part L, Section 1.1307 and 1.1310, an analysis was performed at the base of the tower. This analysis calculated the combined Maximum Permissible Exposure (MPE) from transmitters currently in operation at the site along with any proposed transmitters. Worst-case scenarios were used whenever possible including the assumption that all transmitters point directly at the ground. The results of our calculations presented in Table 1 show that the collective %MPE at the base of the tower is 13.117%. This value is far below the 100% MPE limit for General Population/Uncontrolled, and therefore is compliant with the FCC rules for human exposure. The FCC exposure guidelines and limits are attached in Appendix A, and all calculations and assumptions are shown below.

Note: Analysis of the proposed microwave dishes was performed and found to be negligible in comparison with power densities resulting from PCS applications. For example, microwave power density at the base of the tower for this site is 0.0000022762 mw/cm<sup>2</sup>, which equates to 0.00022762 % MPE. For this reason, these values are not represented in Table 1.

A site layout drawing of the proposed equipment can be seen on the following page.

NEXTEL ARRAY (172' ACL)

AT&T WIRELESS ARRAY (162' ACL)

VOICESTREAM ARRAY (152' ACL)

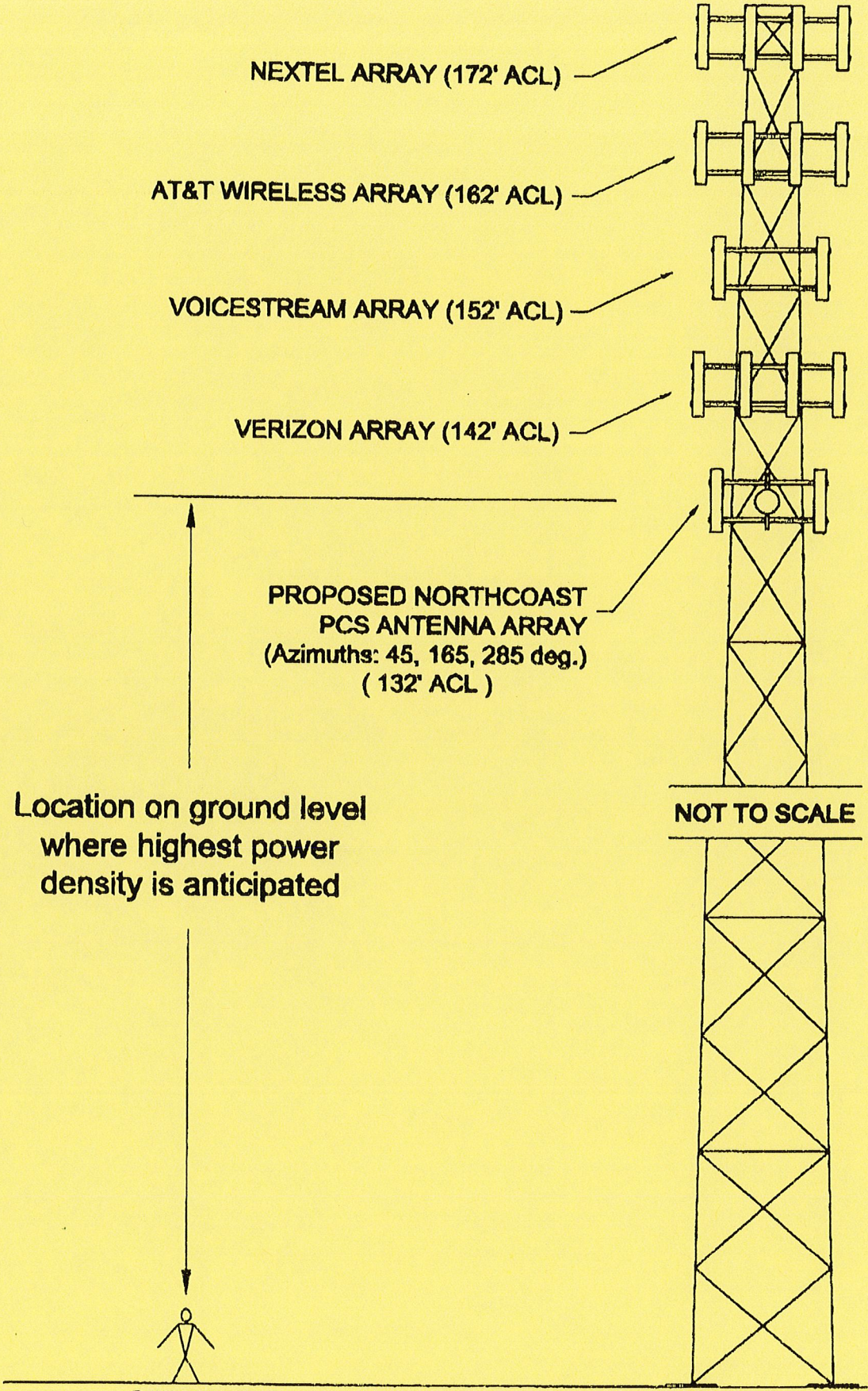
VERIZON ARRAY (142' ACL)

PROPOSED NORTHCOAST  
PCS ANTENNA ARRAY  
(Azimuths: 45, 165, 285 deg.)  
(132' ACL)

Location on ground level  
where highest power  
density is anticipated

NOT TO SCALE

SITE 184.010.1, 1 HARTFORD SQUARE, NEW BRITAIN



**Table 1 Calculated Power Density and %MPE**

CARRIER NAME	Radiating Centerline of Antennas (ft)	Radial distance from source (m)	Vertical Gain (dBd)	E.I.R.P. (Watts)	Power Density S ( $\mu\text{W}/\text{cm}^2$ )	Power Density Limits Slim ( $\mu\text{W}/\text{cm}^2$ )	% MPE
Northcoast PCS	132.0	38.4	-0.2	1580.801	21.8342	1000.0	2.183
Nextel Communications	172.0	50.6	0.0	1360.566	10.8269	567.3	1.910
AT&T Wireless	162.0	47.5	-1.3	1739.720	15.6758	1000.0	1.568
Verizon Wireless	142.0	41.5	0.0	2936.079	34.8089	586.7	5.933
Voicestream	152.0	44.5	0.0	1481.024	15.2355	1000.0	1.524

Total %MPE at Base of Tower = 13.117%

Assumptions used to determine the values listed in Table 1

- The wave reflecting off the ground would add linearly, unattenuated and in phase with the wave arriving directly from the antenna (a worst-case condition).
- There are no obstructions to attenuate the signal broadcast from the antenna to ground level.
- The maximum signal levels will be realized in the direction of the sector antenna.
- Typical antenna models were used for each carrier.
- Calculations are based on human height of 6 feet.
- All calculations are performed at base of tower.

Calculations used to determine the values listed in Table 1

From the FCC Office of Science and Technology (OST) Bulletin #65 Edition 97-01 dated August 1997, the power density (S) can be predicted as follows:

$$S = \frac{2.56 \times \text{EIRP}}{4 \times \text{Pi} \times R^2} \text{ (}\mu\text{W}/\text{cm}^2\text{)}$$

Where:

EIRP = P + G + C

P = Power to antenna.

G = Gain of antenna.

C = Cable loss

R = Radial distance from source.

Pi = 3.1415

The calculation for Percentage Maximum Permissible Exposure:

$$\%MPE = (S / S_{lim}) * 100$$

Where:

S = Calculated Power Density

S<sub>lim</sub> = FCC Power Density Limit for Maximum Permissible Exposure to Public

**Appendix A- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)**  
(Reference Table 1. Title 47 CFR)

**(A) Limits for Occupational/Controlled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

**(B) Limits for General Population/Uncontrolled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

\*Plane-wave equivalent power density

NOTE 1: *Occupational/controlled* limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

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