STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

September 6, 2002

Christopher B. Fisher, Esq.
Cuddy & Feder & Worby LLP
90 Maple Avenue
White Plains, NY 10601-5196

RE: **EM-AT&T-028-020814** - AT&T Wireless PCS, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 355 Route 85, Colchester, Connecticut.

Dear Attorney Fisher:

At a public meeting held on September 5, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice received in our office on August 14, 2002. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/laf

c: Honorable Jenny Contois, First Selectman, Town of Colchester
Liz Rasmussen, Zoning Enforcement Officer, Town of Colchester
Maureen Woodstrom, Spectrasite Communications
Thomas F. Flynn III, Nextel Communications
Michele G. Briggs, Southwestern Bell Mobile Systems

RECEIVED
AUG 14 2002
CONNECTICUT
SITING COUNCIL

NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY AT 355 ROUTE 85, COLCHESTER, CONNECTICUT

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. seq. ("PUESA"), and Sections 16-50j-72(b) of the Regulations of Connecticut State Agencies adopted pursuant to the PUESA, AT&T Wireless PCS, LLC d/b/a AT&T Wireless ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 355 Route 85, Colchester, Connecticut (the "Route 85 Facility"), owned by SpectraSite Communications, Inc., ("SpectraSite"). AT&T Wireless and SpectraSite have agreed to share the use of the Route 85 Facility, as detailed below.

The Route 85 Facility

The Route 85 Facility consists of an approximately one hundred eighty (180) foot monopole (the "Tower") and associated equipment currently being used for wireless communications by Nextel and Bell South.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by URS Corporation, including a site plan and tower elevation of the Route 85 Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets at grade needed to provide personal communications services ("PCS"). AT&T Wireless will install 6 panel antennas at approximately the 150 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76"H x 30" W x 30" D) located on a concrete pad within the existing fenced compound. As evidenced in the structural evaluation prepared by SpectraSite, annexed hereto as Exhibit A, AT&T has confirmed that the Tower is structurally capable of supporting the addition of AT&T Wireless' antennas.

AT&T Wireless' Facility Constitutes An Exempt Modification

The proposed addition of AT&T Wireless' antennas and equipment to the Route 85 Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas and equipment to the Tower will not result in an increase of the Tower's height nor extend the site boundaries. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. As set forth in an Emissions Report prepared by Satish Bhandare, RF Engineer, annexed hereto as Exhibit B, the total radio frequency electromagnetic radiation power density at the Tower site's boundary will not be increased to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General

Statutes and MPE limits established by the Federal Communications Commission. For all the foregoing reasons, addition of AT&T Wireless' facility to the Tower constitutes an exempt modification which will not have a substantially adverse environmental effect.

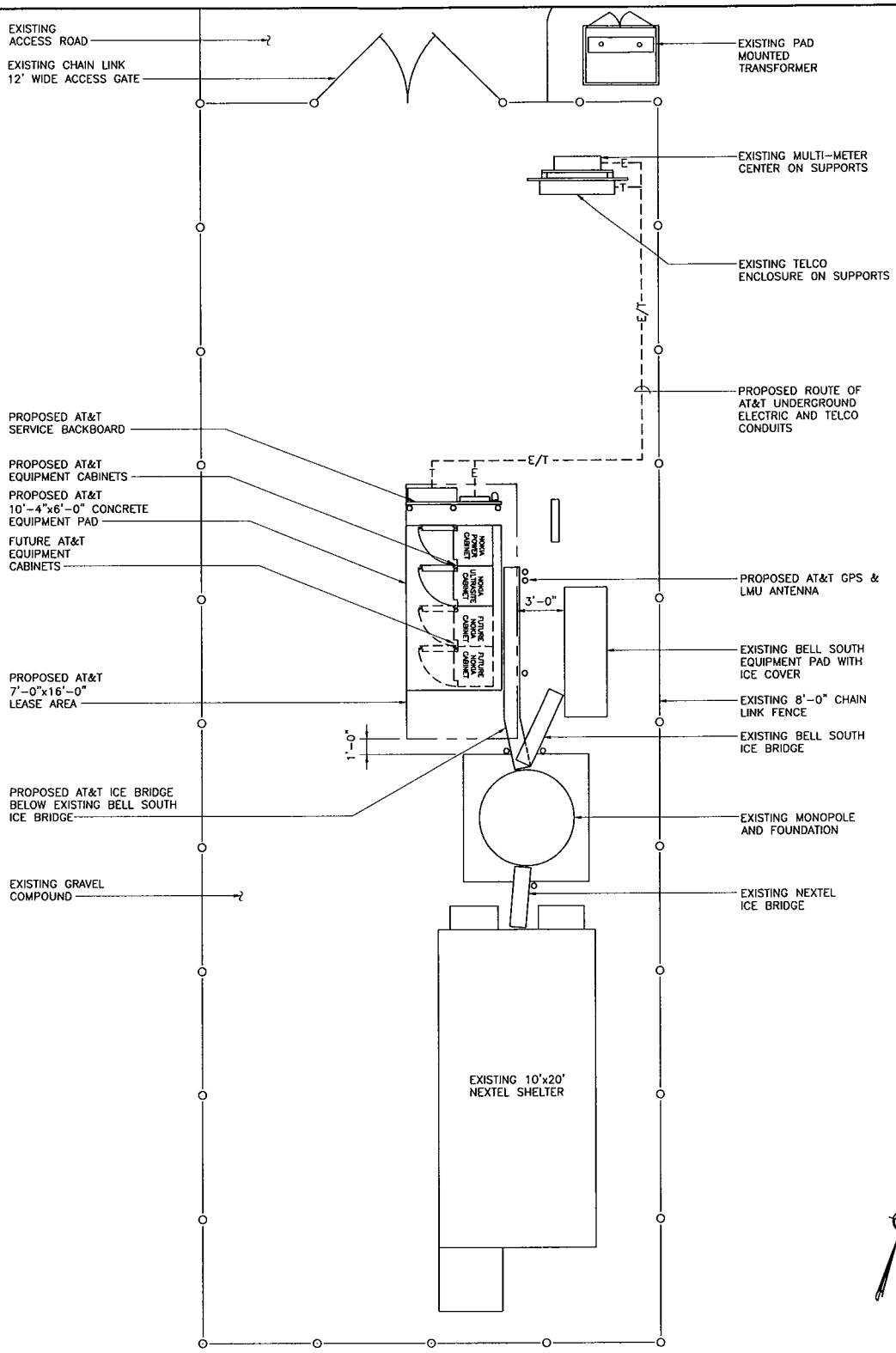
Conclusion

Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Route 85 Facility meets the Council's exemption criteria.

Respectfully Submitted,

Christopher B. Fisher, Esq.
On behalf of AT&T Wireless

cc: First Selectman, Town of Colchester
RJ Wetzel, Bechtel



1 / SC-1 COMPOUND PLAN

SCALE: 1" = 10'-0"

0 5 10 20

ISSUED FOR SITING COUNCIL

LATITUDE:	41.54494 (NAD 83)
LONGITUDE:	72.30478 (NAD 83)

URS
URS CORPORATION-AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CT. 06067
1-(860)-529-8882
1-(860)-529-5566 (FAX)

AT&T
AT&T WIRELESS PCS LLC
12 OMEGA DRIVE
STAMFORD, CONNECTICUT 06902

DRAWING TITLE: COMPOUND PLAN

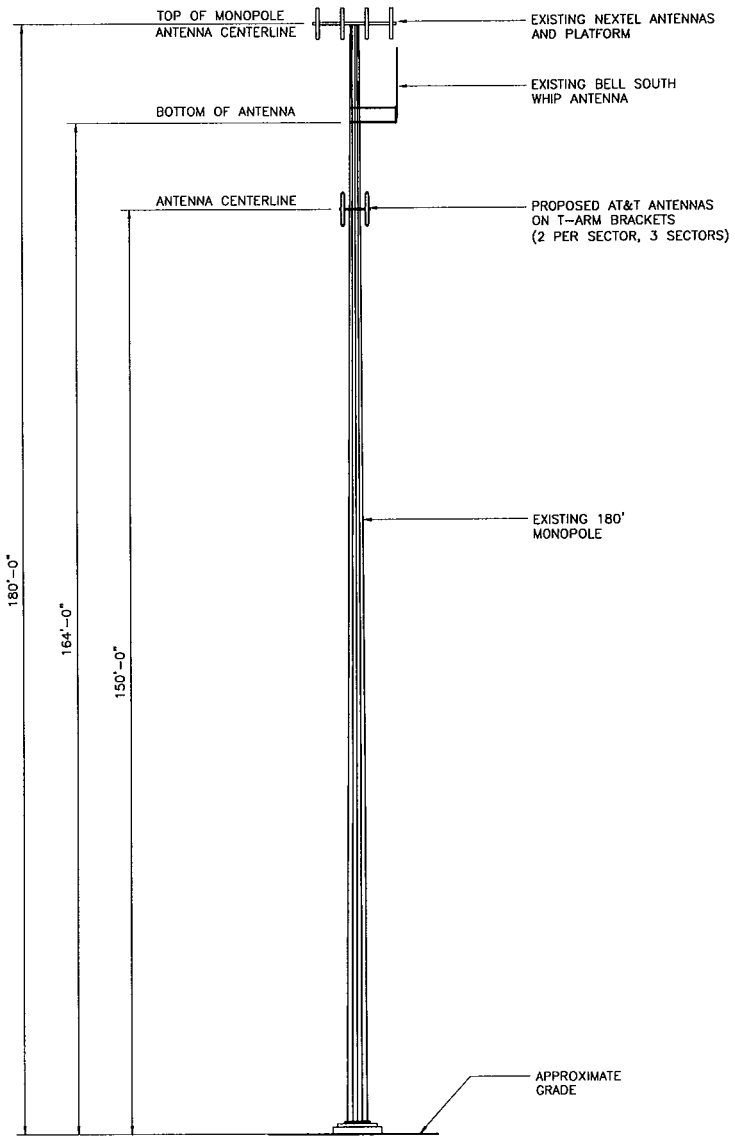
PROJECT INFORMATION:
COLCHESTER SOUTH
CT-730
355 ROUTE 85
COLCHESTER, CONNECTICUT

PROPERTY OWNER:
M&J AUTO RECYCLING
PO BOX 908
COLCHESTER, CONNECTICUT

DRAWING TITLE: 907-009-730B-SC1

REVISION NO. 1	DRAWN BY: RB
DATE ISSUED: 08/09/02	CHECKED BY: JCF
SCALE: AS NOTED	APPROVED BY:
	SHEET NO. 1 OF 2

URS JOB NO.: F302224.79



1 / SC-2 TOWER ELEVATION

SCALE: 1"=30'

0 15 30 60

ISSUED FOR SITING COUNCIL

LATITUDE:	41.54494 (NAD 83)
LONGITUDE:	72.30478 (NAD 83)

URS
URS CORPORATION-AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CT. 06067
1-(860)-529-8882
1-(860)-529-5566 (FAX)

AT&T
AT&T WIRELESS PCS LLC
12 OMEGA DRIVE
STAMFORD, CONNECTICUT 06902

DRAWING TITLE: TOWER ELEVATION

PROJECT INFORMATION:
COLCHESTER SOUTH
CT-730
355 ROUTE 85
COLCHESTER, CONNECTICUT

PROPERTY OWNER:
M&J AUTO RECYCLING
PO BOX 908
COLCHESTER, CONNECTICUT

DRAWING TITLE: 907-009-730B-SC2

REVISION NO. 1	DRAWN BY: RB
DATE ISSUED: 08/09/02	CHECKED BY: JCF
SCALE: AS NOTED	APPROVED BY:
	SHEET NO. 2 OF 2
URS JOB NO.: F302224.79	

SpectraSite

RE: CT-0001 [Colchester] Date: *July 24, 2002*

Structural Evaluation of 180' Valmont Monopole
355 Route 85
Coulchester, CT 06415
New London County

SpectraSite Engineering has performed a *Level 1 evaluation*[1] for the above-noted tower. The evaluation was based on the requirements of the TIA/EIA-222-F Standard for a basic wind speed of **85 mph** without ice and 75% of the wind load with ½" radial ice.

Table 1. Existing and Proposed Antennas

ELEVATION *(Ft-AGL)*	ANTENNA	CARRIER	COAX*	NOTES
180	(9) Swedcom ALP-E-9011D on T-Arm Mounts	Nextel	(9) 7/8"	Existing
164	(1) Antel BCD-87010 on Side Arm Mount	Cingular	(1) 1-1/4"	Existing
150	(6) Allgon 7250 on T-Arm Mounts	AT&T	(12) 1-1/4"	Proposed

**** Coax installed inside monopole.***

The subject tower and foundation are ***adequate*** to support the above stated loads and ***in conformance*** with the requirements of TIA/EIA-222-F Standard.

The tower should be re-evaluated as future loads are added or if actual loads are found different from those mentioned in Table 1.

Should any questions arise concerning this report please contact the undersigned.

STATE OF CONNECTICUT
CALVIN J. PAYNE
No. 21060
LICENSED
PROFESSIONAL ENGINEER

Jason R. Manners, *E.I.*
Engineering Associate

07-29-2002
Calvin J. Payne, *P.E.*
Chief Engineer

1 *Level 1 evaluation* means:
- the applied (existing and proposed) loads (Table 1) on the tower are compared to the original design loads,
- the design wind criteria is compared to the recent code requirements.

RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

SITE ID: 907-009-730

June 26, 2002

Prepared by AT&T Wireless Services, Inc.
Satish Bhandare, **RF Engineer**

Table of Contents

1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at *355 Route 85, Colchester, CT.* This analysis uses site-specific engineering data to determine the predicted levels of radio frequency (RF) electromagnetic energy in the vicinity of the proposed facility and compares those levels with the Maximum Permissible Exposure (MPE) limits established by the Federal Communications Commission.

2. Site Data

Site Name: ***Preston Central***	
Number of simultaneously operating channels	12
Type of antenna	Allgon 7250.03
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	150 feet
Antenna Aperture Length	5 feet

3. RF Exposure Prediction

The following equations established by the FCC, in conjunction with the site data, were used to determine the levels of RF electromagnetic energy present in the vicinity of the proposed facility[1]:

$$PowerDensity = \frac{0.64 * 1.64 * N * ERP(\theta)}{\pi * R^2} \ (mW/cm^2) \qquad \textit{Eq. 1-Far-field}$$

Where, ***N***= Number of channels, ***R***= distance in cm from the RC (Radiation Center) of antenna, and ***ERP(θ)*** = The power of a half wave dipole expressed in milliwatts in the direction of prediction point. This is the correct equation for antennas which have their gain expressed in dBd.

$$PowerDensity = \frac{P_{in} / ch * N * 10^3}{2 * \pi * R * h * \alpha / 360} \ (mW/cm^2) \qquad \textit{Eq. 2-Near-field}$$

Where P_{in}/ch = Input power to antenna terminals in watts/ch, ***R*** = distance to center of radiation, ***h*** = aperture height in meters, α = 3 dB beam-width of horizontal pattern.

[1] RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts (μ W), a millionth of a watt, per square centimeter (cm^2). Data comparing predictive analysis with on site measurements has demonstrated that power density can be effectively predicted at given locations in the vicinity of a wireless antenna facility.

4. FCC Guidelines for Evaluating the Environmental Effects of RF Radiation

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by a Second Memorandum Opinion and Order. These new rules represent a consensus of the federal agencies responsible for the protection of public health and the environment, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Health and Safety (NIOSH), and the Occupational Safety and Health Administration (OSHA).

Under the laws that govern the delivery of wireless communications services in the United States, as amended by the Telecommunications Act of 1996, the FCC has exclusive jurisdiction over RF emissions from personal wireless antenna facilities, which include cellular, PCS, messaging and aviation sites. [2] Pursuant to its authority under federal law, the FCC has established rules to regulate the safety of emissions from these facilities.

5. Comparison with Standards

Exhibit A shows the levels of RF electromagnetic energy as one moves away from the antenna facility. As shown in Exhibit A, the maximum power density is 0.000667 mW/cm^2 which occurs at 1600 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.00001 mW/cm^2 at a distance of 4 feet. Table 1 below shows the Maximum Permissible Exposure (MPE) limits established by the FCC. There are different MPE limits for public/uncontrolled and occupational/controlled environments.

Table 1: Maximum Permissible Exposure limits for RF radiation

Frequency	*Public/Uncontrolled*	*Occupational/controlled*	*Maximum power density at Accessible location*
Cellular	.580 mW/cm^2	2.9 mW/cm^2	0.000667 mW/cm^2
PCS	1 mW/cm^2	5 mW/cm^2	

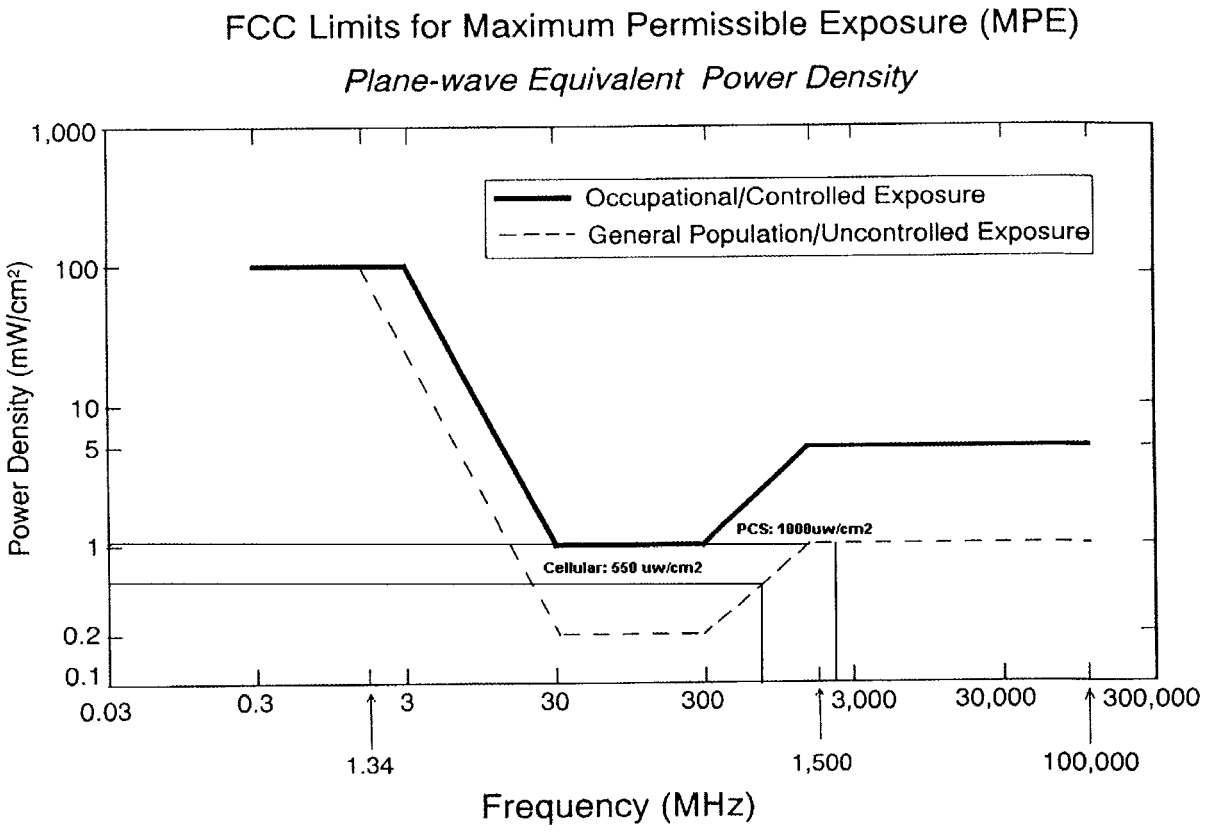
The maximum power density at the proposed facility represents only 0.1% of the public MPE limit for PCS frequencies.

6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 0.000667 mW/cm^2, a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

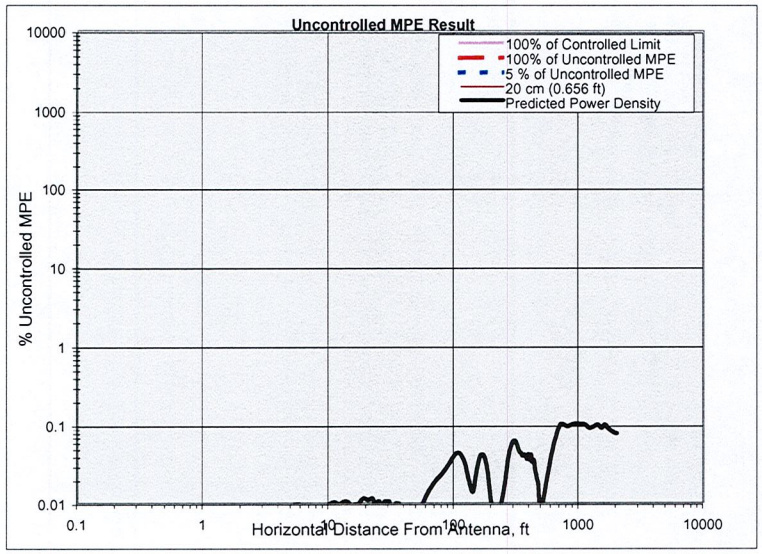
[2] 47 U.S. C. Section 332 (c) (7)(B)(iv) states that "[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions."

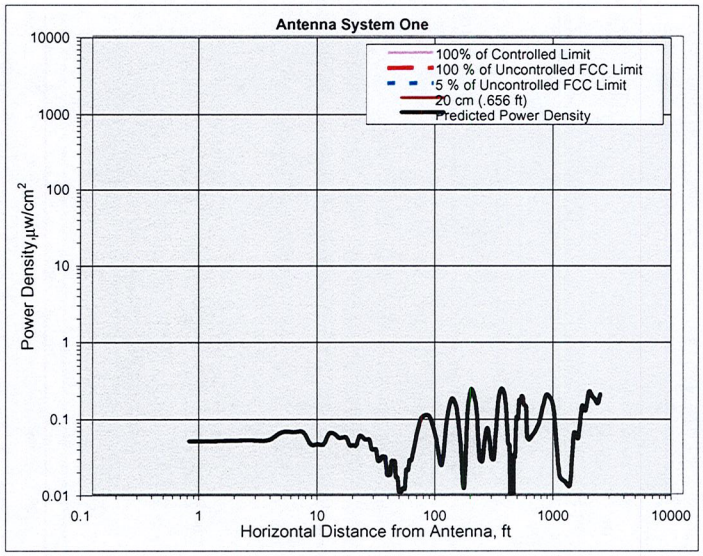
7. FCC Limits for Maximum Permissible Exposure



8. Exhibit A

MPE RESULTS FOR CT-730





Number of Antenna Systems: 3

Meets FCC Controlled Limits for The Antennas Systems.

Meets FCC Uncontrolled Limits for The Antenna Systems.

Meets 5% of FCC Uncontrolled Limits for The Antenna Systems.

No Further Analysis Required.

	Power Density		@Horiz. Dist.
	mW/cm^2	% of limit	feet
Maximum Power Density =	0.000667	0.10	1600.00
984.07 times lower than the MPE limit for uncontrolled environment			
Composite Power (ERP) =	9,000.00	Watts	

Antenna System One

	units	Value
Frequency	MHz	1945.00
# of Channels	#	12
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	5.86
(Center of Radiator)	feet	150.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		Allgon 7250.03
Max Ant Gain	dBd	16.30
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.11
Ant HBW	degrees	65.00
Distance to Ant_{bottom}	feet	147.45
WOS?	Y/N?	n

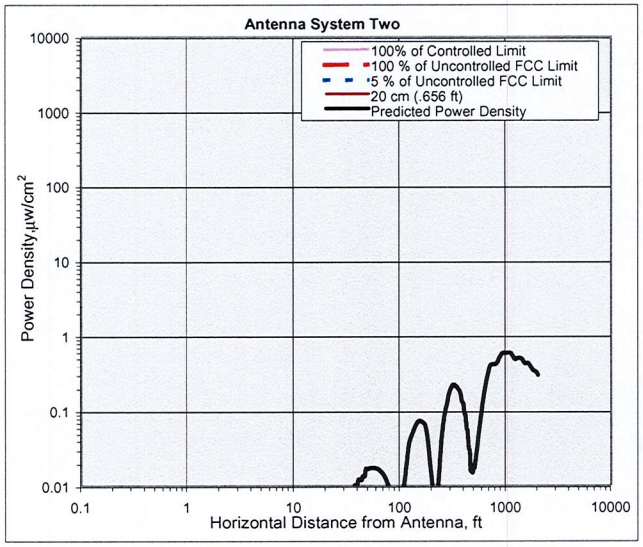
Site ID: 907-009-730
Site Name: Colchester South
Site Location: 355 Route 85
Colchester, CT

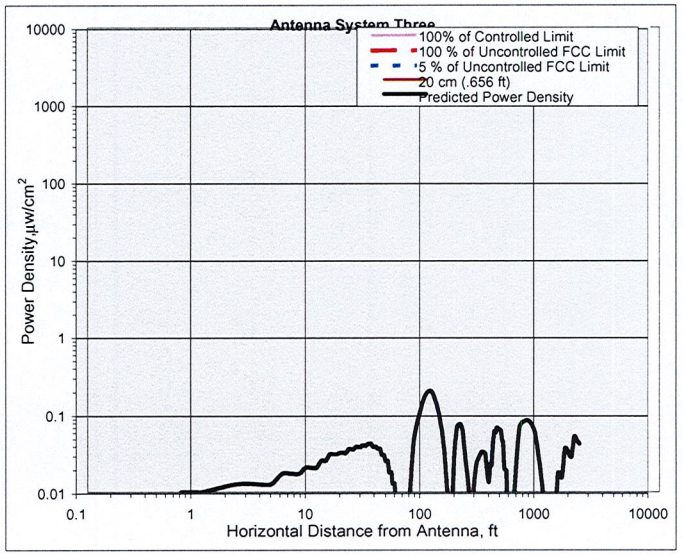
Performed By: Satish Bhandare

Date: 7/23/02

Ant System ONE Owner: AT&T
Sector: 3
Azimuth: 0/120/240

MPE RESULTS FOR CT-730





Antenna System Two

	units	Value
Frequency	MHz	890.00
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	18.53
(Center of Radiator)	feet	180.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		SC9012
Max Ant Gain	dBd	11.30
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	4.00
Ant HBW	degrees	95.00
Distance to Ant_{bottom}	feet	178.00
WOS?	Y/N?	n

Ant System TWO Owner: Nextel
Sector: 3
Azimuth 0/120/240

Antenna System Three

	units	Value
Frequency	MHz	960.00
# of Channels	#	4
Max ERP/Ch	Watts	500.00
Max Pwr/Ch Into Ant.	Watts	50.00
(Center of Radiator)	feet	164.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		BCD 87010
Max Ant Gain	dBd	10.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	11.20
Ant HBW	degrees	360.00
Distance to Ant_{bottom}	feet	158.40
WOS?	Y/N?	n

Ant System Three Owner: BellSouth
Sector: 1
Azimuth 0

9. For Further Information

Additional information about the environmental impact of RF energy from personal wireless antenna facilities can be obtained from the Federal Communications Commission:

Dr. Robert Cleveland
Federal Communications Commission
Office of Engineering and Technology
Washington, DC 20554

RF Safety Program: 202-418-2464
Internet address: rfsafety@fcc.gov
RF Safety Web Site: www.fcc.gov/oet/rfsafety

10. References

[1] The Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. Section 332 (c)(7)(B)(iv).

[2] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Notice of Proposed Rulemaking, ET Docket 93-62, 8 FCC Rcd 2849 (1993).

[3] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Report and Order, ET Docket 93-62, FCC 96-326, adopted August 1, 1996. 61 Federal Register 41006 (1996).

[4] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Second Memorandum Opinion and Order, ET Docket 93-62, adopted August 25, 1997.

[5] *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields*, OET Bulletin 65, August, 1997.