

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

August 20, 2002

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

RE: **EM-AT&T-164-020724** - AT&T Wireless PCS, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 419 Broad Street, Windsor, Connecticut.

Dear Attorney Fisher:

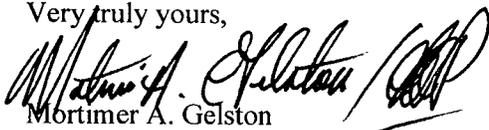
At a public meeting held on August 15, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the condition that Southern New England Telephone plants trees to augment screening of the tower compound.

The proposed modifications are to be implemented as specified here and in your notice received in our office on July 24, 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 Donald Trinks, Mayor, Town of Windsor
Mario Zavarella, Town Planner, Town of Windsor
Michele G. Briggs, Southerwestern Bell Mobile Systems, LLC



FAX

TO: DORRY PHELPS
(SITING COUNCIL)

DATE: AUG 1/02

PAGE: 1 OF 2

FROM: MARIO ZAVARELLA

860.285.

COPY OF
ATTACHED IS 10-13-98 LETTER
SENT TO JOEL RINEBOLD BY
P. VAN WILGEN, THAT WE DISCUSSED.
THE PLANTINGS WERE NEVER INSTALLED.
PLEASE INSTALL PLANTING TO ALSO
SCREEN EQUIPMENT SHED CURRENTLY
PROPOSED.

M Zavarella



FILE 5.5 (W)

SNET Mobility, Inc.
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7614

October 13, 1998

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

Peter W. van Wilgen
Director - Real Estate Operations

Dear Joel:

This is in reference to our meeting of September 29, 1998 with Mr. Mario Zavarella, Town Planner of Windsor, and our planned Bellboy tower replacement behind our Windsor Central Office building. I wish to confirm certain items discussed at that meeting so that everyone is comfortable with the replacement tower and the work to be done.

The new tower will be installed in the same location as the existing one. The concrete base for the new tower will be constructed around the existing tower foundation, with the existing tower then being removed and the new one installed in its place. The new tower will be the same height, but will be somewhat wider in order to accommodate the present and future platforms, which will be of a low profile design. The future platform will not be installed initially, but will be added later after a second carrier has requested use of the location and has been approved by the Connecticut Siting Council.

The new tower will be painted the same green color as the existing one, either at the factory or on-site after installation. New trees (white pines) will be planted around the base of the tower to replace and add to the ones which will need to be removed for the new tower construction.

Tom Fenton, our Construction Manager, will oversee the construction of the tower replacement as he has done at other locations, and I'm sure the Council and Town will be pleased with his work.

Very truly yours,

Copies to: Mario Zavarella, Tom Fenton, Paul Brann, Marshall West, Bruce Woundy

OK
10-19-98
SNET
TMS

RECEIVED

JUL 24 2002

CONNECTICUT
SITING COUNCIL

**NOTICE OF INTENT TO MODIFY AN
EXISTING TELECOMMUNICATIONS FACILITY AT
419 BROAD STREET, WINDSOR, 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 419 Broad Street, Windsor, Connecticut (the "Broad Street Facility"), owned by SNET ("SNET"). AT&T Wireless and SNET have agreed to share the use of the Broad Street Facility, as detailed below.

The Broad Street Facility

The Broad Street Facility consists of an approximately one hundred and one (101) foot monopole (the "Tower") and associated equipment currently being used or proposed for wireless communications use by SNET. A chain link fence surrounds the Tower compound.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by URS Corporation-AES, including a compound plan and tower elevation of the Broad Street 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 5 panel antennas at approximately the 91 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 letter of structural integrity prepared by SpectraSite Engineering, 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

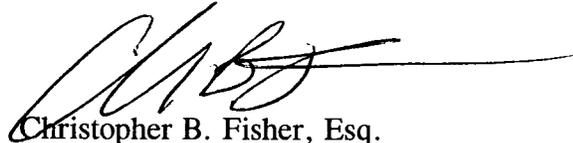
The proposed addition of AT&T Wireless' antennas and equipment to the Broad Street Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas 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 Nader Soliman, 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

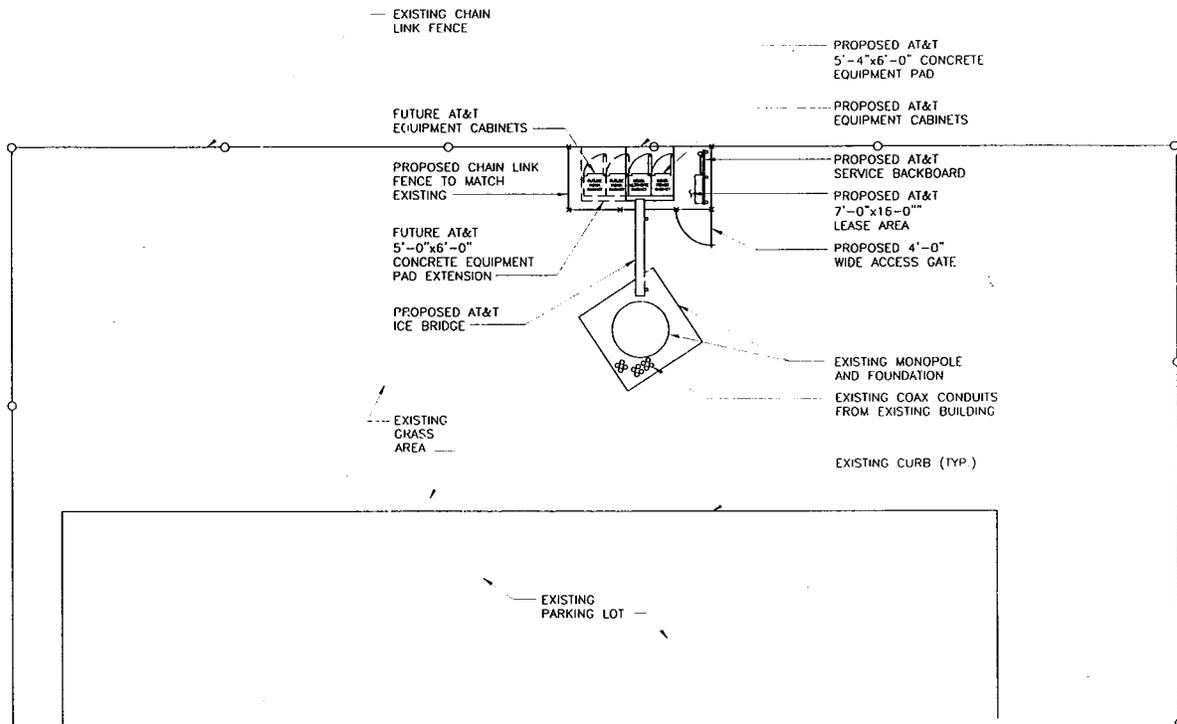
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Broad Street Facility meets the Council's exemption criteria.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'C.B. Fisher', with a long horizontal line extending to the right.

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

cc: R. Leon Churchill, Jr., Town Manager, Town of Windsor
Adam Loew, WFI



1 COMPOUND PLAN
 SC-1 SCALE: 1" = 20'-0"



ISSUED FOR SITING COUNCIL

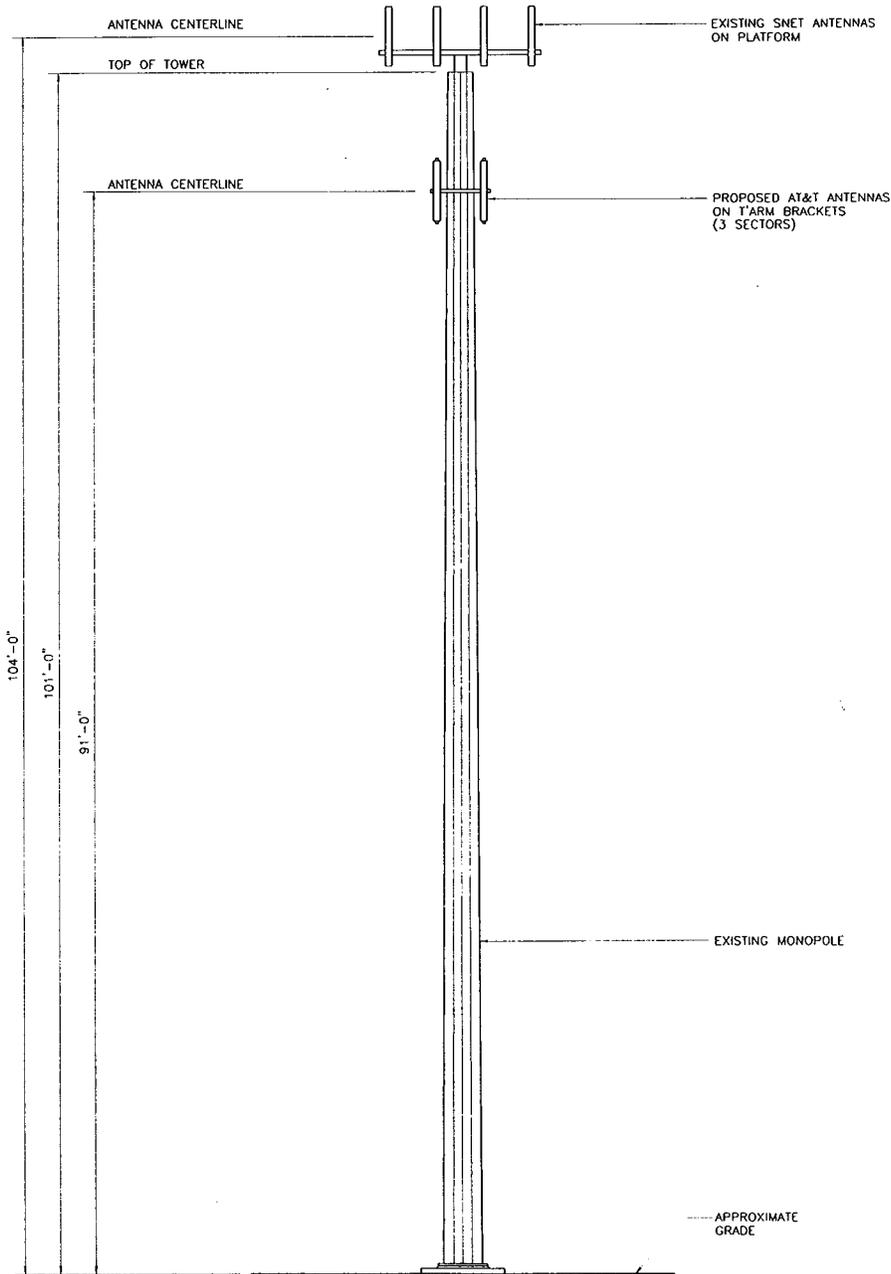
LATITUDE: 41.84589 (NAD 83)
 LONGITUDE: 72.64613 (NAD 83)

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:
 WINDSOR EAST
 CT-356
 419 BROAD STREET
 WINDSOR, CONNECTICUT
PROPERTY OWNER:
 SNET
 111 TRUMBULL STREET
 HARTFORD, CONNECTICUT

DRAWING TITLE:	
907-007-356A-SC1	
REVISION NO. 0	DRAWN BY: VJB
DATE ISSUED: 06/10/02	CHECKED BY: JCF
SCALE: AS NOTED	APPROVED BY:
SHEET NO. 1 OF 2	
URS JOB NO.: F302224.19	



1 TOWER ELEVATION
SC-2 SCALE: 1/16" = 1'-0"



ISSUED FOR SITING COUNCIL

LATITUDE: 41.84589 (NAD 83)
LONGITUDE: 72.64613 (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: WINDSOR EAST
CT-356
419 BROAD STREET
WINDSOR, CONNECTICUT
PROPERTY OWNER: SNET
111 TRUMBULL STREET
HARTFORD, CONNECTICUT

DRAWING TITLE:
907-007-356A-SC2
REVISION NO. 0 DRAWN BY: VJB
DATE ISSUED: 06/10/02 CHECKED BY: JCF
SCALE: AS NOTED APPROVED BY:
SHEET NO. 2 OF 2
URS JOB NO.: F302224.19



RE: CT-0028 [Windsor]
 Structural Evaluation of 100' Valmont Monopole
 419 Broad Street
 Windsor, CT 06095
 Hartford County

Date: April 8, 2002

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 **80 mph** without ice and 75% of the wind load with 1/2" radial ice.

Table 1. Existing and Proposed Antennas

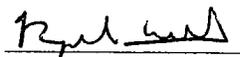
ELEVATION (Ft-AGL)	ANTENNA	CARRIER	COAX*	NOTES
103	(9) Allgon 7120.16.05 on Low Profile Platform Mount	SNET	(9) 1-1/4"	Existing
91	(6) Allgon 7250.03 on T-Arm Mounts	AT&T	(12) 1-5/8"	Proposed

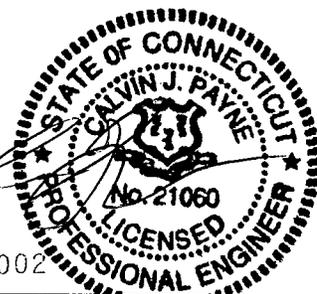
*Coax installed inside pole.

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.


 Raphael Mohamed
 Project Engineer


 04-09-2002
 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: 907-007-356

June 18, 2002

**Prepared by AT&T Wireless Services, Inc.
Nader Soliman RF Engineer**

Table of Contents

1. INTRODUCTION.....	3
2. SITE DATA.....	3
3. RF EXPOSURE PREDICTION	3
4. FCC GUIDELINES FOR EVALUATING THE ENVIRONMENTAL EFFECTS OF RF RADIATION.....	4
5. COMPARISON WITH STANDARDS	4
6. CONCLUSION	4
7. FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE.....	5
8. EXHIBIT A.....	6
9. FOR FURTHER INFORMATION.....	7
10. REFERENCES.....	7

1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at 419 Broad Street, Windsor, CT 06095. 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: <i>Windsor East</i>	
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)	91.00 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 facility¹:

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

Where, N = Number of channels, R = distance in cm from the RC (Radiation Center) of antenna, and $EIRP(\theta)$ = The isotropic power expressed in milliwatts in the direction of prediction point. This is the correct equation for antennas which have their gain expressed in dBi, which is the usual case for the PCS bands.

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

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 0.003748 mW/cm² which occurs at 700 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.000449 mW/cm² 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

<i>Frequency</i>	<i>Public/Uncontrolled</i>	<i>Occupational/controlled</i>	<i>Maximum power density at Accessible location</i>
Cellular	.580 mW/cm ²	2.9 mW/cm ²	0.003748 mW/cm ²
PCS	1 mW/cm ²	5 mW/cm ²	

The maximum power density at the proposed facility represents only 0.56% of the public MPE limit for PCS frequencies.

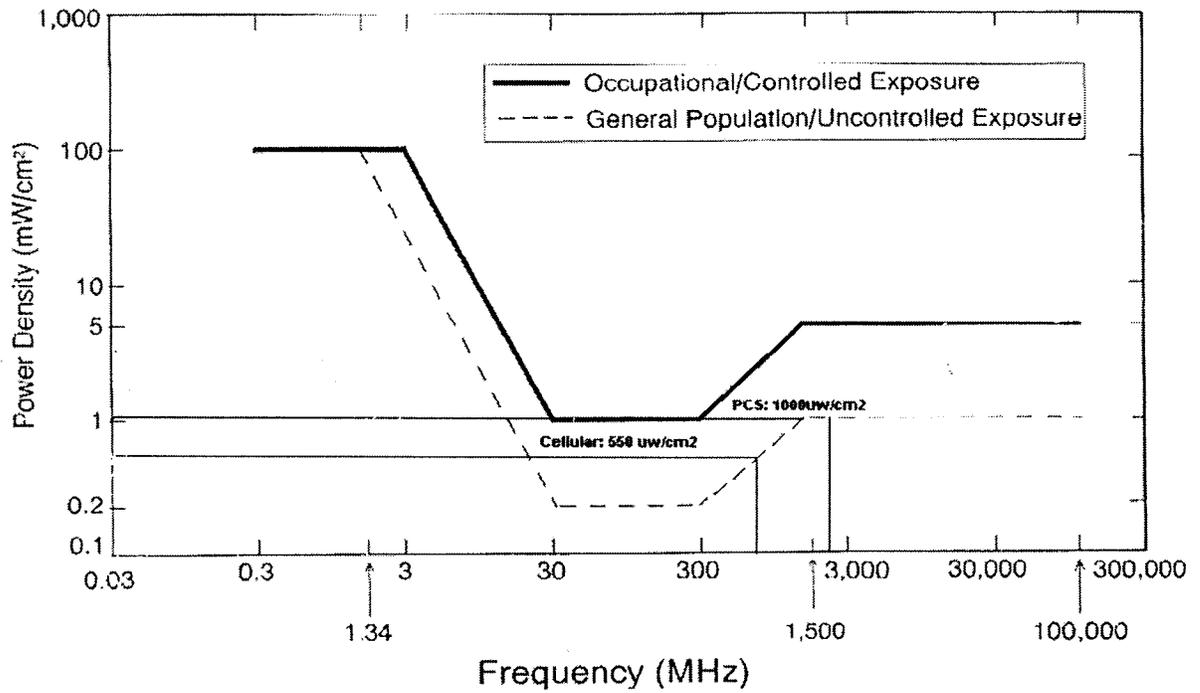
6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 0.003748 mW/cm², a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

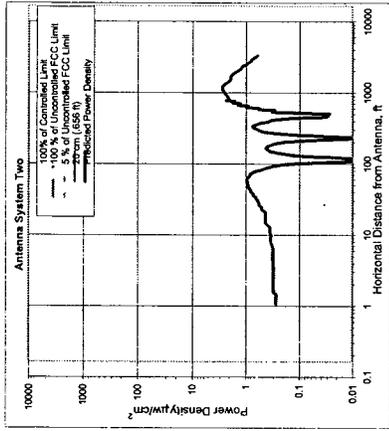
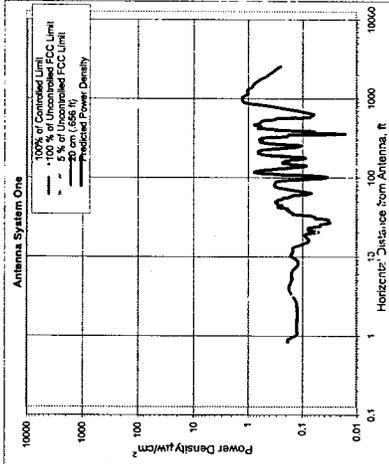
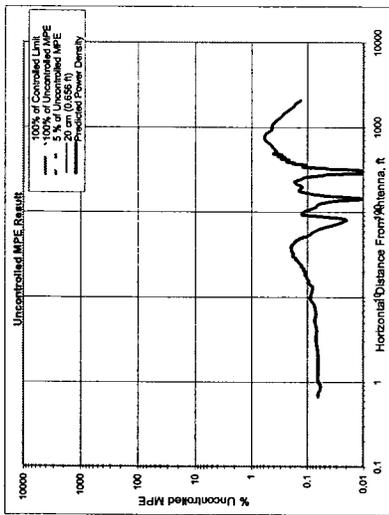
² 47 U.S. C. Section 332 (c) (7)(B)(iv) states that “[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such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

7. FCC Limits for Maximum Permissible Exposure

FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



8. Exhibit A



Number of Antenna Systems: 2
 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 Maximum Permissible Exposure (MPE) Analysis Required.

Power Density	mW/cm ²	@Horiz. Dist.
Maximum Power Density =	0.003748	% of limit
178.36 times lower than the MPE limit for uncontrolled environment.	700.00	feet
Composite Power (ERP) =	10,500.00	Watts

Site ID: 307-007-3356
 Site Name: Windsor East
 Site Location: 419 Broad Street
 Windsor, CT 06095

Performed By: Nader Soliman
 Date: 6/18/02

Antenna System One

Frequency	units	Value
# of Channels	MHz	1-45.00
Max ERP/Ch	Watts	12
Max Power/Ch Into Ant.	Watts	250.00
Max Power/Ch Into Ant. (Center of Radiation)	Watts	5.68
Calculation Point (above ground or roof surface)	feet	31.00
Antenna Model No.		0.00
Max Ant Gain	dBd	Align 7250.93
Down tilt	degrees	18.50
Miscellaneous Att. Co	dB	2.00
Height of aperture	feet	0.00
Ant. HBW	degrees	5.11
Distance to Ant. base	feet	65.30
WGS?	Y/N?	?

Ant System ONE Owner: AT&T
 Sector: 3
 Azimuth: 0120/240

Antenna System Two

Frequency	units	Value
# of Channels	MHz	880.00
Max ERP/Ch	Watts	10
Max Power/Ch Into Ant.	Watts	250.00
Max Power/Ch Into Ant. (Center of Radiation)	Watts	13.11
Calculation Point (above ground or roof surface)	feet	104.00
Antenna Model No.		0.00
Max Ant Gain	dBd	Align 7130.16
Down tilt	degrees	11.40
Miscellaneous Att. Co	dB	0.00
Height of aperture	feet	4.00
Ant. HBW	degrees	113.00
Distance to Ant. base	feet	102.00
WGS?	Y/N?	?

Ant System TWO Owner: Verizon
 Sector: 3
 Azimuth: 40/180/285

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.