

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square New Britain, Connecticut 06051 Phone: (860) 827-2935 Fax: (860) 827-2950

March 12, 2002

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

RE:

EM-AT&T-015-034-083-084-097-103-107-135-167-020131 - AT&T Wireless notice of intent to modify existing telecommunications facilities located in Bridgeport, Connecticut.

Dear Attorney Fisher:

At a public meeting held on March 7, 2002, the Connecticut Siting Council (Council) acknowledged your notice to 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 notices dated January 29, 2002, and March 4, 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/RM/laf

Enclosure

 Honorable Joseph P. Ganim, Mayor, City of Bridgeport Honorable Michael P. Nidoh, City Planner, City of Bridgeport Melanie J. Howlett, Assistant City Attorney, City of Bridgeport

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LOUIS R. TAFFERA

March 4, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

MAR - 5 2002

CONNECTICUT
SITING COUNCIL

Re:

NEIL J. ALEXANDER (also CT) CHARLES T. BAZYDLO (also NJ) THOMAS R. BEIRNE (also DC)

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ROBERT FEDER

AT&T Wireless - EM-AT&T-015-034-083-097-103-107-135-167-020131

38 Kaechele Place, Bridgeport, Connecticut Notice of Further Exempt Modification

Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

This letter and its enclosures are submitted in further support of AT&T's January "notice of further exempt modification" with respect to the above referenced facility. We are in receipt of a February 11, 2002 letter from Melanie Howlett, Esq., submitted on behalf of the City with respect to the above referenced matter and note that as a courtesy to the City, the Council tabled this matter at its February 14, 2002 meeting. We respectfully request that the Council consider this matter at its March 7, 2002 meeting and acknowledge AT&T's notice of further exempt modification based on the information contained in this letter which is simultaneously being provided to the City's representatives.

As fully set forth in AT&T's January notice, AT&T has an existing wireless facility at a tower in Bridgeport and has proposed to replace "in kind" three panel antennas and deploy additional telecommunications equipment in its existing on site shelter. AT&T's original filing in January contained an MPE report which, by field measurement, included power density information for all transmitters currently operating at the site including those of Cingular. As we

March 4, 2002 Page 2

understand it, the City, is looking for information in another form regarding MPE's at the facility (specifically other carriers' calculated emissions some of which are not yet deployed at the site).

In November of 2001, the Council acknowledged an exempt modification by Spectrasite that involved this site (EM-Spectra-015-011005). It is our understanding that the Council acknowledged a new facility by Verizon and certain Cingular upgrades which have not yet been deployed by those carriers. Regardless, a copy of the MPE report that was filed with the Council by Spectrasite is enclosed for your and the City's convenience. Spectrasite's report, which included AT&T's "existing" facility, concluded that worst case cumulative MPE's at the site would be approximately 31% of the FCC's Uncontrolled Standard. In reaching that result, Spectrasite utilized input parameters in its calculations that were even more conservative than FCC's OET Bulletin 65. Indeed, Spectrasite concluded that AT&T's existing facility would contribute 4.2780% of total MPE at the site.

We know, however, that AT&T's existing facility together with its proposed configuration will only be .08% of the standard utilizing FCC OET Bulletin 65 worst case assumptions. See January 2,2002 Report by WFI accompanying AT&T's notice of further exempt modification (also enclosed for the Council and City's convenience are copies of a "long form" report by WFI including the data produced by WFI in taking measurements at the site). Thus, Spectrasite's report, which included calculations of Verizon and Cingular's power density at the site, greatly overstated AT&T's actual contribution to MPE's at the site. Indeed, AT&T's existing and proposed configurations do not account for even 5% of the total MPE's at the site, such that detailed power density analyses are not required by the FCC. 47 CFR § 1.1307(b) (categorical exclusion). Nevertheless, AT&T performed such analysis for purposes of this Siting Council filing and the minor modifications associated therewith. Of note, the field measurements taken by WFI confirm that calculations are truly conservative (i.e. compare % of standards). Accordingly, and regardless of how it is calculated or measured, the site is in compliance with FCC Standards in its existing configuration, as approved for modification by Verizon and Cingular and as proposed to be further modified by AT&T.

March 4, 2002 Page 3

Given all of the foregoing, AT&T Wireless respectfully submits that the proposed replacement antennas and addition of the equipment to the Kaechele Place Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: Robert Mercier, CSC

Melanie J. Howlett, Esq. (w/enc)

Darryl Hendrickson, Bechtel Telecommunications

Peter W. Van Wilgen, Springwich Cellular LP

SpectraSite Site # CT-0048

T&T Sec 1	1169,00000	3.6	В	Aligon	7184.14	142.0	بكار بالمستوار	Control Control	REAL PROPERTY.	
T&T Sec 2	1169.00000	3.6	8	Allgon	7184.14	142.0	100	0.0143	1.0000	1.426
T&T Sec 3	1169.00000	3.6	8	Allgon	7184.14	142.0	100 100	0.0143 0.0143	1.0000 1.0000	1.426 1.426
otal MPE all Al	Γ&T Aπtennas (e:	xisting))							4.278
erizon _i	880.00000		9		•	100.0	200	0.0647	0.5673	11.41
Calculations a	nd Data as Provi	ded by	Verizo	n						11.41
NET Sec 1	880.00000	6.4	20	Swedcom	ALP9212	155.0	100	0.0299	0.5867	E 40
NET Sec 2	880.00000	6.4	20	Swedcom	ALP9212	155.0	100	0.0299	0.5867 0.5867	5.10
NET Sec 3	0000000	6.4	20	Swedcom	ALP9212	155.0	100	0.0299	0.5867	5.10° 5.10°

Total MPE of all Antennas Currently on Tower and Proposed for Tower as Percentage of FCC General Population/Uncontrolled Standard

30.9919

^{*}Ground reflection factor of 1.6 fold for all calculations



EME Evaluation for CT-088

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1 Introduction

The analysis of site CT-088 has been performed to determine its compliance with the rules and guidelines that were established by the Federal Communications Commission (FCC) regarding Maximum Permissible Exposure (MPE). The evaluation of this site has been completed through the use of both predictive methods (using mathematical equations) and physical survey.

It should be noted that the site is categorically excluded as it meets the conditions specified in 47 CFR §1.1307(b) of the FCC's rules and regulations pertaining to broadband PCS non-building mounted antennas. However, since categorical exclusion does not preclude compliance, theoretical studies backed by field survey and measurements were taken to document site compliance.

The equations and modeling tools used for any predictions or pre-calculations assume a worst case scenario in all instances and a 100 % duty cycle for all the transmitters. Hence, the actual exposure at this site is likely to be much less than predicted herein.

The physical survey was carried out using a Narda 8718 EME survey meter and a shaped E-field isotropic probe. This instrument has a shaped probe that has been calibrated to measure power density in percent of the FCC standard. The physical survey also verified antenna locations so as to enable any recommendations to ensure site compliance with the FCC rules.

Appendix I provides a brief description of the specifications of the survey meter.

The fenced enclosure around the site is classified as a controlled area. Hence, access should be granted to authorized personnel only. An MPE and radiation level modeling software was used to predict the power density levels in the vicinity of the site. The results show that, assuming the worst case scenario wherein 16 radio channels and a maximum of 200 watts per channel, the maximum MPE levels close to the antennas of less than 5 % of the occupational/controlled limits are possible.

2 Site Description

Site CT-088 is a monopole measuring 152 feet at its highest point. There is one other carrier on this monopole in addition to AT&T wireless. There is a fenced enclosure around the monopole structure that houses the equipment of the carriers. The antenna centerline of AT&T is at a height of 140 feet. Figure 1 is a schematic diagram of this site showing the monopole, the antenna arrays and their orientations.



Figure 1. Schematic diagram of the monopole and antenna locations.

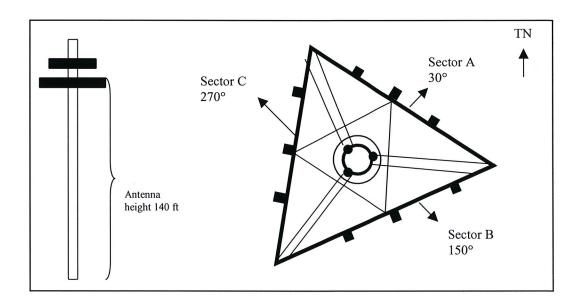


Table I summarizes the parameters of all the AT&T antennas located on this site.

Table 1. Summary of Antenna Parameters

Ant ID	Operator	Antenna type or model	Height above ground level (feet)	Azimuth (degrees)	Maximum ERP {worst case scenario} (Watts)
1	PCS (AT&T)	Allgon 7184.14	140	30	0
2	PCS (AT&T)	Allgon 7184.14	140	30	3200
3	PCS (AT&T)	Allgon 7184.14	140	30	0
4	PCS (AT&T)	Allgon 7184.14	140	150	0
5	PCS (AT&T)	Allgon 7184.14	140	150	3200
6	PCS (AT&T)	Allgon 7184.14	140	150	0
7	PCS (AT&T)	Allgon 7184.13	140	270	0
8	PCS (AT&T)	Allgon 7184.13	140	270	3200
9	PCS (AT&T)	Allgon 7184.13	140	270	0



The maximum number of radio channels assumed per sector is 16^1 ; each with a maximum ERP of 200 W. The maximum ERP is 3200 W per sector. Each of these antennas has an aperture length of 4.27 feet.

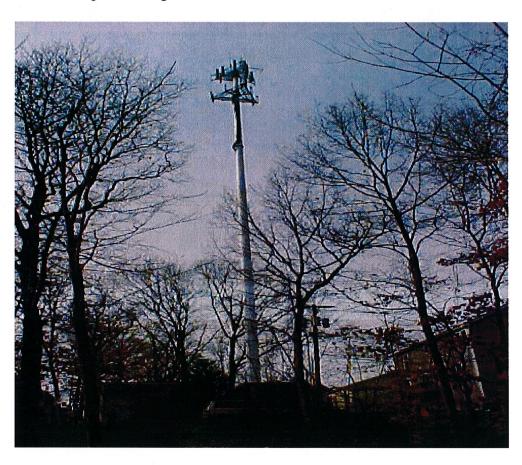


Figure 2. View of the Ox Hill monopole.

Confidential

¹ It should be noted that AT&T is currently designing with 8 radio channels per sector. Hence the predicted values herein are conservative.



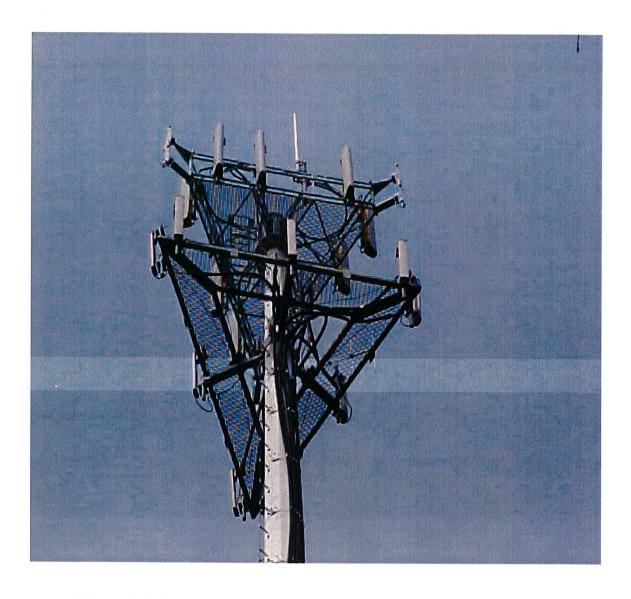


Figure 3. A closer look at the antenna arrays on the Ox Hill monopole.





Figure 4. View of the controlled area enclosure for the Ox Hill monopole.



3 Analysis

3.1 RF study objectives

The purpose of this study is to establish the electromagnetic emissions compliance for this site with respect to the FCC regulations detailed in 47 U.S.C. Section 332(c)(7)(B)(iv) for both the controlled and uncontrolled environments. In addition to analyzing the compliance for the existing AT&T installation, compliance for the upcoming configuration changes as part of the migration towards 3G have been evaluated and appropriate recommendations have been specified. All theoretical calculations have been backed by actual on site measurements wherever possible.

Site CT-088 is categorically excluded as it meets the conditions specified in 47 CFR §1.1307(b) of the FCC's rules and regulations pertaining to broadband PCS non-building mounted antennas (see table below). However, since categorical exclusion does not preclude compliance, theoretical studies backed by field survey and measurements were taken to document site compliance.

The table below depicts the categorical exclusion criteria as specified by 47 CFR §1.1307(b) of the FCC's rules and regulations.

SERVICE (TITLE 47 CFR	EVALUATION REQUIRED IF
RULE PART)	,
Personal communication services	
(part 24)	Non-building mounted antennas:
	height above ground level to the
	lowest point of antenna < 10 m and
	total power of all channels >2000 W
	ERP.

It should be noted that AT&T is currently designing with 8 radios per sector. The predicted power densities in this report are therefore valid for a fully loaded sector only. However, should the predicted MPE levels be lower than the FCC's exposure limits, then an even greater safety margin is available at this site.



3.2 Measurements and Results for current configuration

CURRENT CONFIGURATION:

Table 2. Summary of existing site configuration

1 able 2. Summary of existing	ig site configuration
Operator	Antenna type or model
Site ID	CT-088
Site Name	Ox Hill
Latitude	41.22305
Longitude	-73.21694
Address of structure	38 Kaechele Place
	Bridgeport, CT
Type of structure	Monopole
Antenna structure owner	AT&T
Address of antenna owner	15 East Midland AVE
	Paramus, NJ 07652
FCC class and Type of service	PCS TDMA (IS-136)
Operating frequency	D, E bands (PCS)
Azimuths	30,150,270
Elevation (ft)	140
Antenna configuration	3 antenna per sector
Antenna manufacturer	Allgon
Antenna type	Panel



Table 2. Summary of antenna parameters

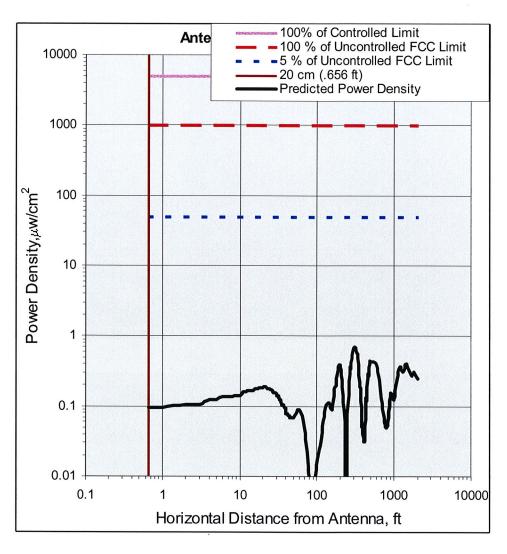
Ant ID	Operator	Antenna type or model	Antenna gain (dBd)	Actual number of channel	Maximum ERP per sector (Watts)	Maximum ERP {worst case scenario} (Watts)
1	PCS (AT&T)	Allgon 7184.14	14.5	0	0	0
2	PCS (AT&T)	Allgon 7184.14	14.5	8	916.6	3200
3	PCS (AT&T)	Allgon 7184.14	14.5	0	0	0
4	PCS (AT&T)	Allgon 7184.14	14.5	0	0	0
5	PCS (AT&T)	Allgon 7184.14	14.5	8	916.6	3200
6	PCS (AT&T)	Allgon 7184.14	14.5	0	0	0
7	PCS (AT&T)	Allgon 7184.13	14.5	0	0	0
8	PCS (AT&T)	Allgon 7184.13	14.5	8	916.6	3200
9	PCS (AT&T)	Allgon 7184.13	14.5	0	0	0

CONTROLLED ENVIRONMENT:

A controlled environment is defined as an area where the general public has no access and only authorized personnel like RF engineers or technicians have access. Since the fenced enclosure around the monopole is locked and contained, it serves as a controlled environment.

A predictive analysis for the worst case scenario assuming 16 channels and 200 Watts and positioned in the vicinity of the antenna was conducted and yielded the following results:





Assuming the height of the observer as 6 feet.

Theoretical measuring point	Predicted value μW/cm²	Maximum Limit for PCS band controlled environment set by FCC μW/cm²	% of the standard
310 feet in front of the antenna	0.71	5000	0.0142



EME Evaluation for CT-088

In addition to predictive measurements, on-site data was recorded inside the enclosure constituting the controlled environment near the monopole. In all areas, less than 5 % of the MPE for occupational/controlled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other existing carrier at that site while the theoretical study focused on the level of emissions contributed by AT&T only. These field measurements prove that the entire site is in compliance with FCC regulations.

The following table describes the on-site measurements taken in the vicinity of the site:

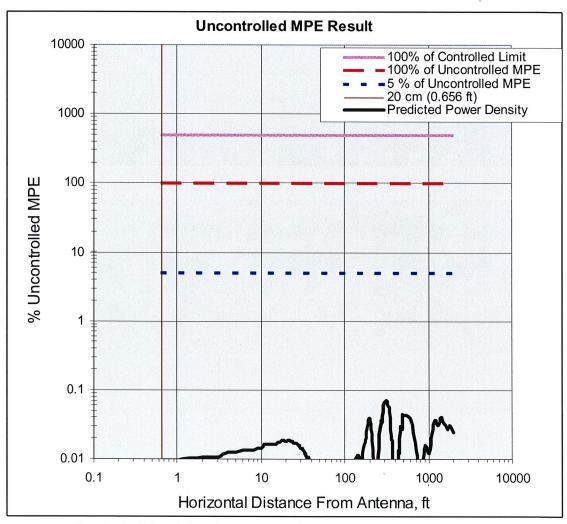
Actual Measuring Point	Measured value μW/cm²	Maximum Limit for PCS band controlled environment set by FCC μW/cm²	% of the standard
1 meters in front of sector 1	6.5	5000	0.13
1 meters in front of sector 2	11	5000	0.22
10 meters in front of sector 2	3.75	5000	0.075
1 meters in front of sector 3	7.5	5000	0.15



UNCONTROLLED:

An uncontrolled environment is defined as an area where the general public has access. All the surrounding area around the monopole serves as an uncontrolled environment.

A predictive analysis for the worst case scenario assuming 16 channels and 200 Watts and positioned in front of the antenna was conducted and yielded the following results:



Assuming the height of the observer as 6 feet on the ground level.





The absolute value of both the controlled and uncontrolled analysis results are similar because in the case of a non-building structure like a monopole, the height of the observer in both cases is the same. However, since the maximum limit for the uncontrolled environment is more stringent than the controlled environment, the value of the percentage of the standard correspondingly increases as shown below.

Maximum value of MPE reading as a percentage of the uncontrolled FCC limit is:

Theoretical measuring point	Predicted value μW/cm²	Maximum Limit for PCS band uncontrolled environment set by FCC μW/cm²	% of the standard
310 feet away in front of the antenna	0.71	1000	0.07

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than 1 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other 1 carriers at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

The following table describes the on-site measurements taken at the street level:

Actual measuring point	Measured value μW/cm²	Maximum Limit for PCS band uncontrolled environment set by FCC μW/cm²	% of the standard
25 meters in front of sector 1	2.8	1000	0.28
35 meters in front of sector 1	1.85	1000	0.185
45 meters in front of sector 1	0.75	1000	0.075
50 meters in front of sector 1	0.01	1000	0.001
15 meters in front of sector 2	2.8	1000	0.28
30 meters in front of sector 2	2.25	1000	0.225
40 meters in front of sector 2	1.55	1000	0.155
45 meters in front of sector 2	0.9	1000	0.09
10 meters in front of sector 3	0.9	1000	0.09
15 meters in front of sector 3	0.75	1000	0.075
20 meters in front of sector 3	0.65	1000	0.065
25 meters in front of sector 3	0.5	1000	0.05

Thus, for the current configuration, AT&T contributes less than 5% of the public/uncontrolled limits in all cases.



3.3 Measurements and Results for future configuration

FUTURE CONFIGURATION:

Table 3. Summary of future site configuration

1 able 3. Summary of future	site configuration
Operator	Antenna type or model
	ė.
Site ID	CT-088
Site Name	Ox Hill
Latitude	41.22305
Longitude	-73.21694
Address of structure	38 Kaechele Place
	Bridgeport, CT
Type of structure	Monopole
Antenna structure owner	AT&T
Address of antenna owner	15 East Midland AVE
	Paramus, NJ 07652
FCC class and Type of service	PCS TDMA (IS-136),
	PCS GSM
Operating frequency	D, E bands (PCS)
Azimuths	30,150,270
Elevation (ft)	140
Antenna configuration	3 antenna per sector
Antenna manufacturer	Allgon
Antenna type	Panel



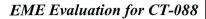
Table 2. Summary of antenna parameters

		1 abic 2	2. Summar y	of antenna p	parameters
Ant ID	Operator	Antenna type or model	Antenna gain (dBd)	Actual number of channels	Maximum ERP {worst case scenario} (Watts)
1	GSM (AT&T)	Allgon 7262.02	14	2	1100
2	PCS (AT&T)	Allgon 7184.14	14.5	8	3200
3	PCS (AT&T)	Allgon 7184.14	14.5	0	0
4	GSM (AT&T)	Allgon 7262.02	14	2	1100
5	PCS (AT&T)	Allgon 7184.14	14.5	8	3200
6	PCS (AT&T)	Allgon 7184.14	14.5	0	0
7	GSM (AT&T)	Allgon 7262.03	14	2	1100
8	PCS (AT&T)	Allgon 7184.13	14.5	8	3200
9	PCS (AT&T)	Allgon 7184.13	14.5	0	0

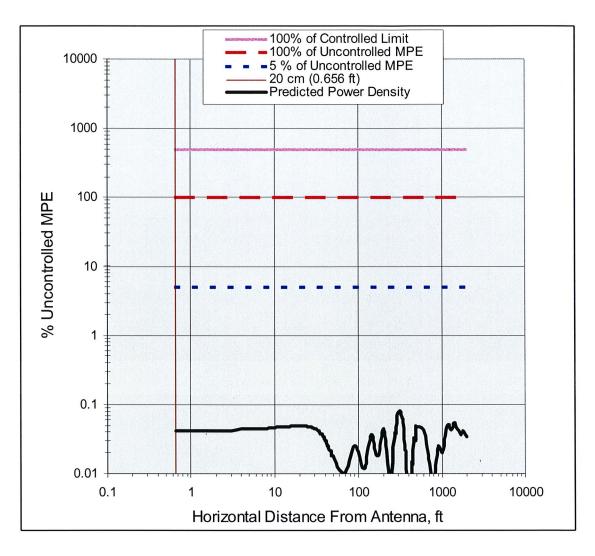
CONTROLLED ENVIRONMENT:

A controlled environment is defined as an area where the general public has no access and only authorized personnel like RF engineers or technicians have access. Since the fenced enclosure around the monopole is locked and contained, it serves as a controlled environment.

A predictive analysis for the worst case scenario assuming 16 channels and 200 Watts for TDMA and a maximum of 4 channels and 275 Watts for GSM and positioned directly in the main beam of the antenna was conducted and yielded the following results:







Assuming the height of the observer as 6 feet.

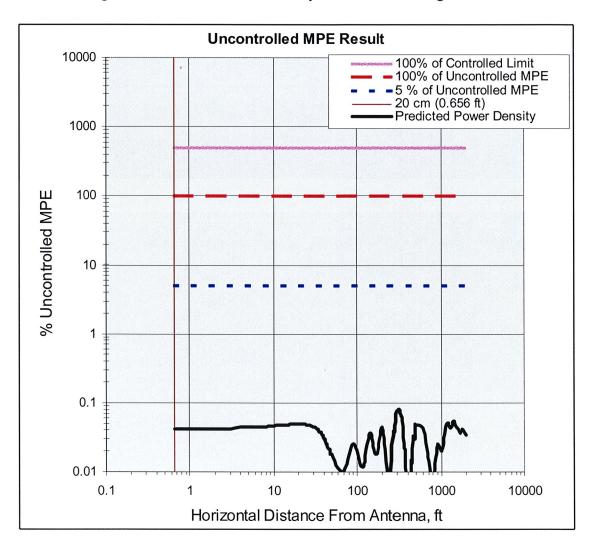
Theoretical measuring point	Predicted value μW/cm²	Maximum Limit for PCS band controlled environment set by FCC μW/cm²	% of the standard
310 feet in front of the antenna	0.81	5000	0.0162



UNCONTROLLED:

An uncontrolled environment is defined as an area where the general public has unrestrained access. All the surrounding area around the building serves as an uncontrolled environment.

A predictive analysis for the worst case scenario assuming 16 channels and 200 Watts TDMA and 4 channels and 275 Watts and positioned in front of the antenna sector at ground level was conducted and yielded the following results:



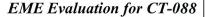
Assuming the height of the observer is 6 feet.



EME Evaluation for CT-088

Theoretical measuring point	Predicted value μW/cm²	Maximum Limit for PCS band uncontrolled environment set by FCC μW/cm²	% of the standard
310 feet away in front of the antenna	0.81	1000	0.08

Thus, for the future configuration, AT&T contributes less than 5% of the public/uncontrolled limits in all cases.





Appendix I

A1 The Measurement Equipment

The field survey meter that was used to perform the field tests was the model 8718 field strength meter and the B8742D field intensity probe, both from Narda Microwave. The meter has a dynamic range of 30 dB and is capable of calculating percentage with respect to the FCC MPE limits. It is portable and has time as well as spatial averaging capabilities. It can also log data for future download and analysis.

The probe is an E-field isotropic shaped probe and is capable of detecting signals in the range 300 kHz to 3 GHz. The calibrated unit (meter and probe) displays the readout in percent of the FCC occupational/controlled MPE limit. The probe is capable of measuring values in the range .6% to 600% of the standard. The shaped response of the probe allows field measurements to be conducted quickly and accurately.



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

February 20, 2002

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

RE:

EM-AT&T-015-034-083-084-097-103-107-135-167-020131 - AT&T Wireless notice of intent to modify existing telecommunications facilities located in Bridgeport, Stamford, Milford, Danbury, Middletown, Orange, Newtown, Norwalk, and Woodbridge, Connecticut.

Dear Attorney Fisher:

At a public meeting held on February 14, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify eleven of the twelve this existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies. The 38 Kaechele Place, Bridgeport site will be presented at a future Council meeting after requested information is received. Although no conditions have been placed on this approval, I am attaching a letter from the Town of Newtown, dated February 14, 2002, for your review and consideration.

The proposed modifications are to be implemented as specified here and in your notice dated January 29, 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 sites that would not increase tower height, extend the boundaries of the tower sites, increase noise levels at any 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. These facilities 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 these towers.

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Thank you for your attention and cooperation.

Setaton

Very truly yours,

Mortimer A. Gelston

Chairman

MAG/RM/laf

Enclosure

c: See attached list.

Decision Letter EM-AT&T-015-034-083-084-097-103-107-135-167-020131 Page 2

Honorable Joseph P. Ganim, Mayor, City of Bridgeport Honorable Michael P. Nidoh, City Planner, City of Bridgeport Melanie J. Howlett, Assistant City Attorney, City of Bridgeport Honorable Mark D. Boughton, Mayor, City of Danbury Dennis Elpern, City Planner, City of Danbury Honorable Herbert C. Rosenthal, First Selectman, Town of Newtown Gary Frenette, Zoning Enforcement Officer, Town of Newtown Honorable Domenique S. Thornton, Mayor, City of Middletown Planning and Zoning Official, City of Middletown Honorable James L. Richetelli, Jr., Mayor, City of Milford Wade Pierce, City Planner, City of Milford Honorable Alex A. Knopp, Mayor, City of Norwalk Stephen Thomas, Planning Chairman, City of Norwalk Honorable Mitchell R. Goldblatt, First Selectman, Town of Orange Paul Dinice, Zoning Enforcement Officer, Town of Orange Honorable Dannel P. Malloy, Mayor, City of Stamford Robin Stein, Planning and Zoning Director, City of Stamford Honorable Amey Marrella, First Selectman, Town of Woodbridge Samuel Spielvogel, Town Planner, Town of Woodbridge

CITY OF BRIDGEPORT
OFFICE OF THE CITY ATTORNEY

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February 11, 200

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John P. Bohannon, Jr.
Barbara Brazzel-Massaro
Russell D. Liskov
John R. Mitola

Ronald J. Pacacha

Via Facsimile and Overnight Mail

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re:

EM-AT&T -015-990913 - AT&T Wireless Notice of Further Exempt Modification

for 38 Kaechele Place, Bridgeport, CT

Dear Mr. Phelps:

I am in receipt on February 6, 2002, of a copy of the petition filed by AT&T Wireless ("AT&T") dated January 29, 2002, regarding their request to modify an existing telecommunications facility at 38 Kaechele Place cited above ("Petition"). Please enter my appearance on behalf of the City of Bridgeport ("City") in this matter. The Petition is also listed as one of the locations to be considered as Item No. 19 on the Agenda for the regularly scheduled meeting of the Siting Council for February 14, 2002.

The Petition as filed does not address the electromagnetic radiation power density levels for all existing equipment located at this existing facility by other FCC license holders, in addition to the installed of additional plant and equipment proposed by the Petition. The City is in the process of reviewing the information we have on filed regarding this location and request that this matter be tabled until the Siting Council's next noticed meeting following February 14, 2002.

If you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely.

Melanie J. Howlett Assistant City Attorney

Cc: William Shaw – Clerk, Bridgeport Planning & Zoning Commission Christopher Fisher, Cuddy, Feder & Worby LLP

90 MAPLE AVENUE WHITE PLAINS, NEW YORK 10601-5196

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ROBERT L. WOLFE
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ROBERT L. OSAR (also TX)
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LOUIS R. TAFFERA

January 29, 2002

VIA FEDERAL EXPRESS

NEIL J. ALEXANDER (also CT)

CHARLES T. BAZYDLO (also NJ)

ROBERT FEDER
CHRISTOPHER B. FISHER (also CT)

ANTHONY B. GIOFFRE III (also CT)

THOMAS R. BEIRNE (also DC)

THOMAS M. BLOOMER JOSEPH P. CARLUCCI

KENNETH J. DUBROFF

SUSAN E.H. GORDON

WAYNE E. HELLER (also CT) KENNETH F. JURIST

MICHAEL L. KATZ (also NJ)

DANIEL F. LEARY (also CT)

JOSHUA E. KIMERLING (also CT)

KAREN G. GRANIK JOSHUA J. GRAUER

BARRY E. LONG

Hon. Mortimer Gelston, Chairman and Members of the Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re: AT&T Wireless Notice of Exempt Modification 38 Kaechele Place, Bridgeport, Connecticut 1590 Newfield Avenue, Stamford, Connecticut 111 School House Road, Milford, Connecticut 36 Sugar Hollow Road, Danbury, Connecticut 90 Industrial Park, Middletown, Connecticut 525 Orange Center Road, Orange, Connecticut Berkshire Road, Newtown, Connecticut 10 Willard Road, Norwalk, Connecticut 1027 Racebrook Road, Woodbridge, Connecticut

S.C. COLLAND MAN

Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

On behalf of AT&T Wireless, we respectfully enclose an original and twenty copies of its notice of exempt modification with respect to the above mentioned facilities together with a check in the amount of \$500.00. We would appreciate it if these matters were placed on the next available agenda for acknowledgment by the Council. Should the Council or staff have any questions regarding this matter, please do not hesitate to contact us.

Very truly yours,

Linda Grant

cc: Christopher B. Fisher, Esq.

C&F&W:

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VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members of the Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re:

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ANTHONY B. GIOFFRE III (also CT)

AT&T Wireless - EM-AT&T-015-990913 38 Kaechele Place, Bridgeport, Connecticut Notice of Further Exempt Modification

January 28, 2002



Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Springwich Cellular Limited Partnership holds the Siting Council certificate for the existing communications tower and related facility located at 38 Kaechele Place, Bridgeport, Connecticut (Docket No. 45). On October 21, 1999 AT&T Wireless ("AT&T"), received the Council's acknowledgement of a notice to modify the existing facility pursuant to Section 16-50j-72 of the Regulations of Connecticut State Agencies (EM-AT&T-015-990913) permitting AT&T to install up to twelve (12) panel antennas at the 140' level on the existing tower, with an associated equipment shelter located within the fenced compound.

This notice of further exempt modification is also being provided pursuant to Section 16-50j-72 of the Council's regulations. AT&T will be replacing three existing antennas and installing additional equipment within the existing shelter at the facility. There will be no other infrastructure changes to AT&T's facility.

The proposed replacement antennas and addition of equipment to AT&T Wireless' facility does not constitute a "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d). The proposed modifications to AT&T Wireless' facility will

January 28, 2002 Page 2

not result in an increase in the Tower's height or extend the boundaries of the existing fenced area surrounding the Tower. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. AT&T made measurements of the existing facility to confirm compliance with MPE limits and as set forth in a report prepared by Wireless Facilities, Inc., annexed hereto, 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. For all the foregoing reasons, the proposed modifications to AT&T Wireless' existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

AT&T Wireless respectfully submits that the proposed replacement antennas and addition of the equipment to the Kaechele Place Facility meets the Council's exemption criteria and requests an acknowledgment of same.

Respectfully Submitted,

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

cc: Mayor, City of Bridgeport

Darryl Hendrickson, Bechtel Telecommunications Peter W. Van Wilgen, Springwich Cellular LP Wireless Facilities, Inc. 1840 Michael Faraday Drive Suite 200 Reston, VA 20190

January 2, 2002

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

RE: FCC Compliance Statement for AT&T Site CT-088 (Ox Hill)

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed in-field RF measurements and office analyses for the above referenced site to determine compliance with FCC mandated Maximum Permissible Exposure (MPE) limits as defined in 47 CFR § 1.1310.

The table below gives a brief summary of the site location, its configuration and associated technical parameters.

Summary of the site configuration and technical parameters:

Site ID	CT-088	
Site Name	Ox Hill	
Latitude	41.22305	
Longitude	-73.21694	
Address of structure	38 Kaechele Place	
	Bridgeport, CT	
Type of structure	Monopole	
Antenna structure owner	AT&T	
Address of antenna owner	15 East Midland AVE	
	Paramus, NJ 07652	
FCC class and Type of service	PCS TDMA (IS-136), PCS GSM	
Operating frequency	D, E bands (PCS)	
Azimuths	30,150,270	
Elevation (ft)	140	
Antenna manufacturer	Allgon	
Antenna type	Panel	

The mathematical equations used in evaluating the power density values are exactly as outlined in the Office of Engineering & Technology (OET) Bulletin Number 65 which contains the FCC guidelines for evaluating human exposure to radio-frequency electromagnetic fields.

In the case of a single radiating antenna, a prediction for power density in the far field of the antenna can be written as:

$$S = \frac{EIRP}{4\pi D^2} = \frac{1.64 * ERP}{4\pi D^2}$$

Where:

 $S = Power density in W/m^2$

EIRP = Effective isotropic radiated power (W)

ERP = Effective radiated power (W)

D = Distance in meters

Using the EPA's recommended factor of 1.6 for 100 % reflection, the worst case power density can be obtained by incorporating this factor into the above equation. If the distance, D, is in meters, the ERP is in Watts, then the worst case power density in μ W/cm² is given by

$$S = \frac{33.4 * ERP}{D^2}$$
 (Section 2, OET bulletin 65).

Where:

 $S = Power density in \mu W/cm^2$

ERP = Effective radiated power (W)

D = Distance in meters

WFI's analysis considered both the current configuration as well as the future GSM deployment AT&T is proposing. For the current configuration, both in-field measurements and a predictive analysis tool were used to determine compliance. For the future deployment, only a predictive analysis was performed. The maximum worst-case values of the power density for this analysis are outlined below:

Configuration	Point of Worst Case Predicted Level	Predicted Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC	% of the Standard
Current PCS TDMA	310 feet away in	0.71	μW/cm²	
configuration	front of the antenna	0.71	1000	0.07
Future PCS TDMA	310 feet away in	0.81	1000	
and GSM	front of the antenna	0.81	1000	0.08
configuration	nont of the antenna			

In addition to predictive analysis, on-site data was recorded at different locations around the monopole. In all areas, less than or equal to 0.28 % of the MPE for public/uncontrolled limits was recorded. The reason the actual measurements are higher than the predicted values is because the actual measurements include emissions from the other carrier at that site while the theoretical study focused on the level of emissions contributed by AT&T only.

On-site measuring point	Worst Case Measured Value μW/cm²	Maximum Limit for PCS Band Uncontrolled Environment Set by FCC μW/cm²	% of the Standard
25 meters in front of sector 1	2.8	1000	0.28
15 meters in front of sector 2	2.8	1000	0.28
10 meters in front of sector 3	0.9	1000	0.09

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meets FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. Thus, the maximum level of RF radiation in all uncontrolled areas (Assuming a worst case scenario and a 100 % duty cycle for all the transmitters.) is less than or equal to 0.28 % of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

To the best of my knowledge, the statements made and information disclosed in this study are complete and accurate.

Sincerely,

Wireless Facilities, Inc.

Dan Hardiman Senior Engineer II

Fixed Network Engineering