



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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E-Mail: [siting.council@po.state.ct.us](mailto:siting.council@po.state.ct.us)

Web Site: [www.state.ct.us/csc/index.htm](http://www.state.ct.us/csc/index.htm)

May 9, 2002

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

RE: **EM-AT&T-059-137-152-020418** - AT&T Wireless notice of intent to modify existing telecommunications facilities located in Groton, **Stonington**, and Waterford, Connecticut.

Dear Attorney Fisher:

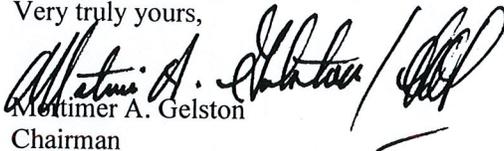
At a public meeting held on May 7, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated April 16, 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/RKE/laf

c: Honorable Frank O'Beirne, Jr., Mayor, Town of Groton  
James R. Sherrard, Planning Chairman, Town of Groton  
Ronald P. LeBlanc, Town Manager, Town of Groton  
Honorable Paul B. Eccard, First Selectman, Town of Waterford  
Thomas V. Wagner, Planning Director, Town of Waterford  
Honorable Peter Dibble, First Selectman, Town of Stonington  
Edward Donnelly, Town Planner, Town of Stonington  
Esther McNany, SBA, Inc.  
Sandy M. Carter, Verizon Wireless  
Stephen Longobardi, Candid Communications

**CUDDY & FEDER & WORBY LLP**

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1971-1995**

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CHARLES T. BAZYDLO (also NJ)  
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ROBERT L. OSAR (also TX)  
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ROBERT C. SCHNEIDER  
LOUIS R. TAFFERA

April 16, 2002

VIA FEDERAL EXPRESS

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

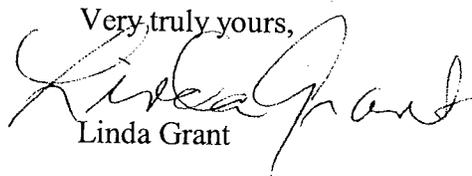
**RECEIVED**

APR 18 2002  
CONNECTICUT  
SITING COUNCIL

Re: AT&T Wireless Notice of Exempt Modification  
45 Fargo Road, Waterford, Connecticut  
53 Dayton Road, Waterford, Connecticut  
75 Roberts Road, Groton, Connecticut  
72 Jerry Brown Road, Stonington, Connecticut  
37-55 Taugwank Spur Road, Stonington, Connecticut

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

On behalf of AT&T Wireless, we respectfully enclose an original and twenty-five 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.

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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: AT&T Wireless – TS- AT&T 137-010501  
37-55 Taugwank Spur Road  
Stonington, Connecticut  
Notice of Exempt Modification

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

On May 10, 2001 the Council ruled that AT&T's proposed shared use of an existing SBA Towers, Inc., facility in Stonington complied with Section 16-50aa of the Regulations of Connecticut State Agencies (TS- AT&T 137-010501) permitting AT&T to install panel antennas on the existing tower, with an associated equipment shelter located within the fenced compound.

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

The proposed 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 addition to AT&T Wireless' facility will 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

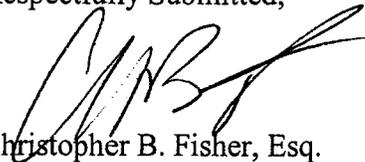
April 15, 2002

Page 2

boundary. AT&T has 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, addition of AT&T Wireless' equipment to its existing facility constitutes an exempt modification which will not have a substantially adverse environmental effect.

Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Taugwank Spur Road Facility meets the Council's exemption criteria and requests an acknowledgement of same.

Respectfully Submitted,



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

cc: First Selectman, Town of Stonington  
Darryl Hendrickson, Bechtel Telecommunications



Wireless Facilities, Inc.  
1840 Michael Faraday Drive  
Suite 200  
Reston, VA 20190

April 1, 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-229 (Stonington Central)**

Dear Mr. Gelston:

On behalf of AT&T Wireless, Wireless Facilities Inc. has performed 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.

<u>Summary of Site Parameters</u>	
Site ID	CT-229
Site Name	Stonington Central
Latitude	41° 22' 55" N
Longitude	71° 54' 11" W
Address of Structure	Taugwonk Road, Stonington, CT 06378
Type of Structure	Monopole
Antenna 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	PCS Band
Azimuths (deg.)	30, 150, 270
Antenna Radiation Center, AGL	160 ft.
Antenna Manufacturer	EMS Wireless
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<sup>2</sup>  
 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 centimeters, the ERP is in Watts, then the worst case power density in mW/cm<sup>2</sup> is given by

$$S = \frac{(1.64)(.64)(ERP)(1000 \text{ mW/W})}{\pi D^2}$$

Where: S = Power density in mW/cm<sup>2</sup>  
 ERP = Effective radiated power (W) (# of channels x ERP/channel)  
 D = Distance in centimeters

The results presented in this analysis are based on the following:

- ◆ WFI's analysis considered the transmit parameters for AT&T's existing TDMA system, for the future GSM deployment they are proposing, and for all other existing carriers.
- ◆ The formula utilized for the calculation is taken directly from the FCC OET Bulletin 65 as shown above.
- ◆ The worst-case scenario was assumed with all of the antennas for both the current and the future installation pointing to the base of the tower.
- ◆ A 100% duty cycle with maximum power and the maximum number of channels for each system was assumed.

Description	AT&T PCS		Voicestream PCS	Sprint PCS	Nextel ESMR	Public Safety VHF
	Current	Future				
Max. ERP/Ch, Watts	115.2	275	123.027	123.027	100	80
Max. No. of Ch/Sector	16	4	8	11	9	1
Max. ERP/Sector, Watts	1843.2	1100	984.215	1353.296	900	80

Antenna Centerline, ft.	160	160	170.5	145	190	195
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The maximum calculated values of power density for this analysis are outlined below:

Provider/Carrier		Point of Worst Case Predicted Level	Predicted Value ( $\mu\text{W}/\text{cm}^2$ )	Maximum Limit for Uncontrolled Environment Set by FCC ( $\mu\text{W}/\text{cm}^2$ )	% of the Standard
AT&T	Current PCS TDMA	Base of the tower	27.93	1000	2.79
	Future PCS GSM	Base of the tower	16.67	1000	1.67
Voicestream, PCS		Base of the tower	13.07	1000	1.31
Sprint, PCS		Base of the tower	25.17	1000	2.52
Nextel, ESMR		Base of the tower	9.55	567.3	1.68
Public Safety, Vhf		Base of the tower	0.80	200	0.40
<b>Total % of Standard</b>					<b>10.37</b>

The results of these analyses indicate that output power levels for the AT&T owned equipment deployed at the above referenced facility meet FCC approved exposure limits for all uncontrolled areas where general population exposure may exist. The maximum level of RF radiation contributed by AT&T in all uncontrolled areas, assuming a worst case scenario and a 100% duty cycle for all transmitters, is equal or less than 4.46% (2.79 + 1.67) of the maximum permissible exposure limit mandated by the FCC and endorsed by the NCRP and ANSI/IEEE.

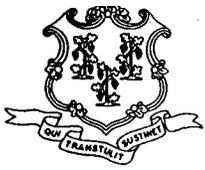
Based on the transmit parameters indicated on the table above, the worst-case composite level of RF radiation in all uncontrolled areas for all identified systems operating at this facility is equal or less than 10.37% of the FCC maximum permissible exposure limit.

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



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May 1, 2002

Honorable Peter Dibble  
First Selectman  
Town of Stonington  
Town Hall  
152 Elm Street  
P. O. Box 352  
Stonington, CT 06378

RE: **EM-AT&T-059-137-152-020418** - AT&T Wireless notice of intent to modify existing telecommunications facilities located in Groton, Stonington, and Waterford, Connecticut.

Dear Mr. Dibble:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for May 7, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps  
Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Edward Donnelly, Town Planner, Town of Stonington