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.ct.gov/csc

March 9, 2004

Kenneth C. Baldwin, Esq.
Robinson & Cole
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-034-040219** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 144 Old Boston Road, Danbury, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on March 4, 2004, 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 February 19, 2004. 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,

Pamela B. Katz, P.E.
Chairman

PBK/laf

c: Honorable Mark. D. Boughton, Mayor, City of Danbury
Dennis Elpern, City Planner, City of Danbury
Michele G. Briggs, Southwestern Bell Mobile Systems
Stephen Marcus, The Marcus Group

G:em\bam-ver\danbury\dc030404.doc

CSC
CONNECTICUT SITING COUNCIL

ROBINSON & COLE LLP

EM-VER-034-040219

Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

February 19, 2004

Via Hand Delivery

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

Re: **Notice of Exempt Modification – Antenna Swap**

Danbury South – 144 Old Boston Road (Moses Mountain) Danbury, CT

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") has established a telecommunications facility at the above-referenced tower site. Cellco currently maintains eight (8) panel-type cellular antennas on the existing tower. Cellco now intends to modify this facility by simply replacing four (4) of the cellular antennas with four (4) PCS antennas.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Mark D. Boughton, Mayor of the City of Danbury.

As the Council knows, on May 23, 2003, Cellco acquired, from Northcoast Communications, a license to provide PCS service throughout Connecticut. The proposed modifications to the above referenced tower will allow Cellco to provide its customers in Connecticut, with enhanced wireless voice and data services. While these modifications are not significant, Cellco feels compelled to present this modification to the Council for review.

The planned modification to the above-referenced facility falls squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modification will not result in any increase in the overall height of the existing tower structure. Cellco's replacement antennas will be mounted at the same level as their existing antennas.

2. The proposed modification will not affect any ground-mounted equipment and will not require the extension of the site boundaries.

3. The proposed modification will not increase noise levels at the facility by six decibels or more.

4. The proposed modification will not result in radio frequency (RF) power density levels at the facilities that exceed the Federal Communications Commission (FCC) adopted safety standard. Attached to this notice are RF Power Density calculations for both the Cellco cellular and PCS antennas at the Danbury South cell site.

Also attached are the specifications for the existing cellular and proposed PCS antennas to be used at this site. Please note that the existing cellular antennas are in fact heavier and have a larger wind area than the proposed PCS antennas. An updated structural analysis is therefore not required for the proposed modifications.

For the foregoing reasons, Cellco respectfully submits that the proposed modification to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

cc: Mark D. Boughton, Mayor
Sandy M. Carter, Verizon Wireless

General Power Density

Site Name: Danbury S, CT
Tower Height: 69 Ft. rad center

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissable Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
Verizon	880	9	200	1800	69	0.1360	0.56733	23.97%
Verizon	1900	3	285	855	69	0.0646	1	6.46%
Total Percentage of Maximum Permissible Exposure								30.42%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

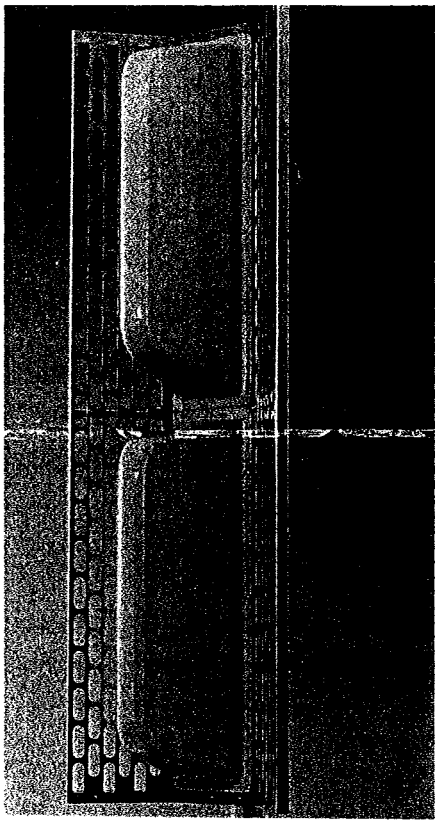
Absolute worst case scenario, maximum values used.

Swedcom Corporation

ALP 6014-N

Log-Periodic Reflector Antenna

60 Degrees 14 dBd



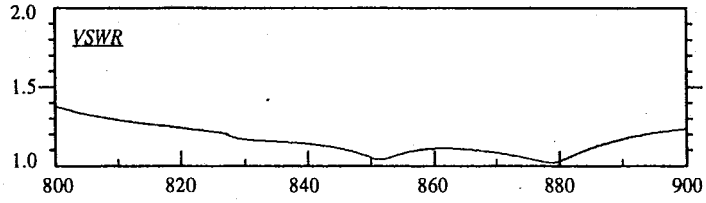
Features:

- ❑ **Broadbanded. (800-900 MHz)**
- ❑ **Low backlobe radiation. Front-to-back ratio better than 30 dB**
- ❑ **Low Intermodulation Products.**
- ❑ **Low Wind-load.**
- ❑ **Low weight.**
- ❑ **Small size.**
- ❑ **Rugged design.**

Please see the following pages including radiation patterns/tables for *ALP 6014-N.*

Electrical Specifications:

Frequency range:	806-896 MHz
Impedance:	50 ohm
Connector:	N-female or 7/8" EIA
VSWR:	Typ. 1.3:1 max 1.5:1
Polarization:	Vertical
Gain:	14 dBd
Front to back ratio:	>30 dB
Side-lobe supression:	>17 dB
Intermodulation: (2x25W):	IM3 >146 dB IM5 >153 dB IM7 & IM9 >163 dB
Power Rating:	500 W
H-Plane: -3 dB	60 °
E-Plane: -3 dB	15 °
Lightning Protection:	DC Grounded



Mechanical Specifications:

Overall Height:	52 in	(1320 mm)
Width:	17.3 in	(440 mm)
Depth:	11.4 in	(290 mm)
Weight including brackets:	28.9 lbs	(13 Kg)
Rated wind velocity:	113 mph	(180 Km/h)
Wind Area (CxA/Front):	5.4 sq.ft	(0.5 sq.m)
Lateral thrust at rated wind		
Worst case:	780 N	

Materials:

Radiating elements:	Aluminum
Element housing:	Grey PVC
Back-plate:	Aluminum
Mounting hardware	
clamps:	Hot dip galvanized steel
bolts:	Stainless steel

Manufactured by: ***Allgon System AB***

DECIBEL®

948F65T2ZE-M

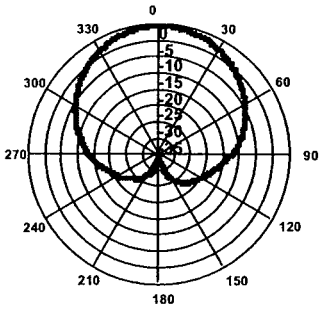
17.2 dBi, Log, No Screen Antenna
1850-1990 MHz

1850-1990 MHz

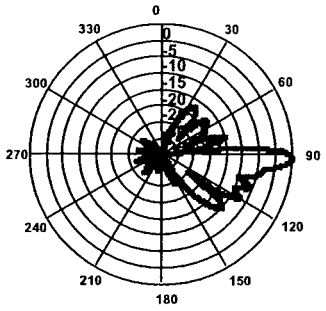
dB Director®
MaxFill™

65°

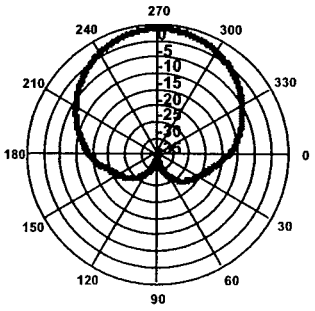
- Exceptional azimuth roll-off reducing soft hand-offs and improving capacity
- Excellent upper side lobe suppression
- Deep null filling below the horizon assures improved signal intensity
- Low profile appearance and low wind loading profile for easier zoning approvals



Azimuth 1950 MHz (Tilt=2)



Vertical 1950 MHz (Tilt=2)



Horizontal 1950 MHz (Tilt=2)

ELECTRICAL		MECHANICAL	
Frequency (MHz):	1850-1990	**Weight:**	9.5 lbs (4.3 kg)
Polarization:	Vertical	**Dimensions (LxWxD):**	48 X 6.5 X 4 in (1219 X 165 X 102 mm)
Gain (dBd/dBi):	15.1/17.2	**Max. Wind Area:**	2.2 ft² (0.2 m²)
Azimuth BW:	65°	**Max. Wind Load (@ 100mph):**	88 lbf (391 N)
Elevation BW:	8°	**Max. Wind Speed:**	125 mph (201 km/h)
Beam Tilt:	2°	**Radiator Material:**	Low Loss Circuit Board
USLS* (dB):	>16	**Reflector Material:**	Passivated Aluminum
Null Fill* (dB):	<15	**Radome Material:**	ABS, UV Resistant
Front-to-Back Ratio* (dB):	40	**Mounting Hardware Material:**	Galvanized Steel
VSWR:	<1.33:1	**Connector Type:**	7/16 DIN - Female (Bottom)
IM Suppression - Two 20 Watt Carriers:	-150 dBc	**Color:**	Light Gray
Impedance:	50 Ohms	**Standard Mounting Hardware:**	DB390 Pipe Mount Kit, included
Max Input Power:	250 Watts	**Downtilt Mounting Hardware:**	DB5098, optional
Lightning Protection:	DC Ground		

ANDREW®

Andrew Corporation
8635 Stemmons Freeway
Dallas, Texas U.S.A 75247-3701
Tel: 214.631.0310

Fax: 214.631.4706
Toll Free Tel: 1.800.676.5342
Fax: 1.800.229.4706
www.andrew.com

dbtech@andrew.com

Warranty: Five Years
Date: 7/24/2003