Jules Cohen, P.E.
Consulting Engineer

ENGINEERING REPORT
2003 MEASUREMENTS OF RADIO-FREQUENCY FIELDS
MADE ON BEHALF OF SPRINT PCS
IN VICINITY OF LEE PUMPING STATION, ARLINGTON, VIRGINIA

At the request of Sprint PCS, measurements were made on Thursday, July 24,2003, of the levels of radio-frequency ("RF") power density in the vicinity of the Lee Pumping Station, Arlington, Virginia. This report describes the measurements made and the results obtained.

The measurements of power density were begun at approximately 10:20 a.m. and continued for approximately an hour and a half. A determination was first made that the PCS transmitters, feeding energy to the antennas mounted on the catwalk railing of the water tower, were operating at their normal output. The measurements were conducted using a Narda, Model 8718B (S/N 06004) meter with a Model B8742D (S/N 01004) probe last calibrated by the manufacturer on October 9, 2002, and periodically checked for continued accuracy. The Model B8742D probe covers the entire RF spectrum from 0.3 to 3,000 MHz (millions of cycles per second). The probe has a shaped response providing an output permitting the meter to read in terms of percent of the Federal Communications Commission's 1997 standard for the general population/uncontrolled environment.

A feature of the Narda meter is a built-in power source that permits checking the several elements making up the probe. To provide uniform pickup in all directions, the probe includes three, orthogonally arranged antennas, the outputs of which are added. The normal operation of each of the three arms can be confirmed. This was done prior to use of the meter and probe for measurement purposes. The meter was also "zeroed" following the

procedure prescribed by the manufacturer. Another feature of the meter that was employed is the retention of the maximum reading during any reading cycle at a location.

The exposure standard is based on whole body average; therefore a scan is made that approximates the cross section of the body and the average noted. For the purpose of this study, the maximum reading during each scan was recorded also. Both average and peak are included in the results shown.

Measurements were made just outside the pumping station fence and in the streets including 24th, 25th, Wakefield, Vernon, Woodrow and Wakefield Court. Results are included in the tabulation on the following page.

As shown in the tabulation, the total RF power density from the Sprint PCS transmission plus all other emission sources within the range of frequencies from 0.3 to 3,000 MHz is substantially below the exposure permitted by the Federal Communications Commission for the uncontrolled (general population) environment.

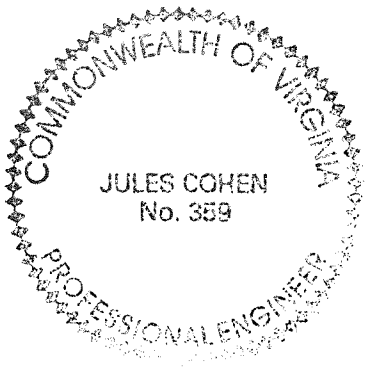
The exposures measured from year to year show a high degree of variability. That variability (and magnitude) is principally a function of the changes in usage of paging and land mobile transmitters sharing the Lee Pumping Station site. The Personal Communications Service transmitters' contribution to the total is of a minor nature. The magnitude of RF exposure measured this year is lower than that measured in 2002, but similar in magnitude to that measured in previous years. Usage of land mobile transmitters, unlike that of Sprint PCS, is highly variable and is likely to account for the variability noted.

Location	Average % of Standard	Peak % of Standard
At Pumping Station Fence Gate	1.050	1.650
Road Alongside Fence	0.3375	1.068
24th and N. Wakefield	0.5250	1.068
2245 N. Vernon	1.331	1.556
2336 N. Vernon	0.3562	0.8062
2355 N. Vernon	0.5437	0.9000
4409 25th North	0.4125	0.9937
4415 25th North	0.5625	0.9000
4427 25th North	0.9562	1.162
2411 N. Woodrow	0.1500	0.3937
23rd St. and N. Wakefield	0.3937	0.6937
23rd Rd. and N. Wakefield	0.9562	1.425
24th and N. Wakefield Ct.	1.031	1.500
2455 N. Wakefield Ct.	2.512	2.756
2471 N. Wakefield Ct.	2.193	2.568
4631 24th North	5.681	5.850
4651 24th North	5.550	5.868
Entrance to Missionhurst	5.381	5.568
4710 25th North	5.325	5.700

I declare under the penalty of perjury that the foregoing is correct to the best of my knowledge and belief.

Jules Cohen, P.E.

July 24, 2003



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July 24, 2003

VIA FEDEX

Ms. Christina Anne Newland
Sprint PCS
Mailstop KSLNXC0201-1050
15500W. 113th Street
Lenexa, KS 66219

Dear Christina:

As reported in my e-mail of this date, the meter manufacturer provided a "loaner" so that I could complete the Arlington measurements without further delay.

With this letter, you will find the original and two copies of the report. This is the form used previously in submitting the information to the county.

Please let me know if anything more is needed.

Sincerely yours,

Jules Cohen, P.E.

Enclosures