



Site Development  
Washington/Baltimore

**Sprint PCS**  
6905 Rockledge Drive  
Bethesda, MD 20817  
Voice: 301-214-9200  
Fax: 301-571-0158

**VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

November 4, 1999

Mr. Reggie Nixon  
Dept. of Community Planning, Housing and Development  
#1 Courthouse Plaza  
2100 Clarendon Blvd, Suite 608  
Arlington, Virginia 22201

**Re: Deed of Lease dated 2/25/98 between the County Board of Arlington County Virginia and APC Realty and Equipment Co. for the lease of the Lee Pumping Station water tank (WAC005).**

Dear Mr. Nixon:

Enclosed please find the 1999 Report on Measurements of Radio-Frequency Fields made on behalf of Sprint PCS in the vicinity of Lee Pumping Station, Arlington, Virginia. Unfortunately it appears that we did not obtain a 1998 report, which was an oversight on our part. We apologize for the oversight and for not providing the enclosed report in a timelier manner.

We want to assure you that future testing and reporting of results will occur on an annual basis as required by Arlington County.

If you have any questions or concerns, please call me at 310-214-9234.

Sincerely,

Greg Soule.  
Property Specialist

Cc: Mr. Robert Zimmerman, Old Dominion Civic Association  
Mr. Ned Rhodes, Donaldson Run Civic Association  
Mr. Steve Souder, Arl. Co. Emergency Comm. Center  
Mr. Carlton Gilbert, Zoning Administrator

*Jules Cohen, P.E.*  
*Consulting Engineer*

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**ENGINEERING REPORT  
1999 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 Friday, February 19, 1999, 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 8:30 a.m. and continued for approximately an hour. With the assistance of Messrs. Scott Warden and Frank Blevins, technicians employed by Sprint, 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 8718 (S/N 4144) meter with a new, Model B8742D (S/N 01004) probe calibrated by the manufacturer prior to delivery in early February, 1999. The Model B8742D probe covers the entire RF spectrum from 300 kHz to 3.0 GHz (3,000 MHz). 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, Woodson 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 APC transmission plus all other emission sources within the range of frequencies from 300 kHz to 3 GHz is substantially below the exposure permitted by the Federal Communications Commission for the uncontrolled (general population) environment.

The exposures measured show a high degree of variability. That variability (and magnitude) is a function of shielding provided by terrain and by 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 somewhat less than that measured previously. That decrease has to be attributable to the land mobile transmissions since no change has taken place in the Sprint operations. The number of land mobile transmitters has not necessarily changed, but usage at the time of measurement was probably less during the 1999 measurement period than during the previous measurements.

*Jules Cohen, P.E.*  
*Consulting Engineer.*

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Measurements at Lee Pumping Station

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<b>Location</b>	<b>Average % of Standard</b>	<b>Peak % of Standard</b>
At Pumping Station Fence Gate	0.038	0.28
Road Alongside Fence	0.26	1.8
24th and N. Wakefield	0.19	0.86
2245 N. Vernon	0.64	1.1
2336 N. Vernon	1.9	2.3
2355 N. Vernon	1.46	3.0
4409 25th North	0.7	1.8
4415 25th North	0.19	1.13
4427 25th North	0.26	1.2
2425 N. Woodrow	0.019	0.06
2408 N. Woodrow	0.6	3.3
23rd St. and N. Wakefield	0.73	3.6
23rd Rd. and N. Wakefield	1.91	2.5
24th and N. Wakefield Ct.	1.9	3.6
2455 N. Wakefield Ct.	0.39	0.97
2471 N. Wakefield Ct.	*	0.075
4631 24th North	0.45	0.88
4651 24th North	0.038	0.35
Entrance to Missionhurst	0.13	0.75
4710 25th North	*	*

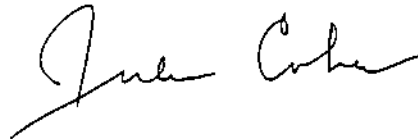
\* Below the limit of meter sensitivity.

*Jules Cohen, P.E.*  
*Consulting Engineer*

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A handwritten signature in cursive script that reads "Jules Cohen".

Jules Cohen, P.E.  
Va. Cert. No. 359

February 19, 1999