



## ARLINGTON COUNTY, VIRGINIA

### County Board Agenda Item Meeting of July 8, 2006

**DATE:** June 29, 2006

**SUBJECT:** U-2823-94-4 USE PERMIT REVIEW for panel antennae and equipment cabinets on water tower located at 2400 N. Wakefield St. (Sprint PCS/Lee Pumping Station) (RPC #05-005-072)

**Applicant:**

APC Realty and Equipment Company, LLC/Sprint PCS

**C.M. RECOMMENDATION:**

Renew use permit, subject to all previous conditions, with revised Condition #2, and with a review by the County Board in one (1) year (July 2007).

**ISSUES:** None.

**SUMMARY:** This is a use permit review for the operation of six (6) panel antennas and two (2) equipment cabinets located at the Lee Pumping Station along the borders of the Old Dominion and Donaldson Run neighborhoods. The applicant has submitted the required emissions report, which shows emissions well below the maximum level considered safe by the Federal Communications Commission (FCC). Therefore, staff recommends renewing the use permit, subject to all previous conditions, with revised Condition #2, and with a review by the County Board in one (1) year (July 2007). The revised Condition #2 sets a deadline for the submission of the annual report as June 1 of each year.

**BACKGROUND:** The use permit was originally approved by the County Board in 1995. The original applicant, Sprint PCS, sold several of the antennas to Voicestream LLC in 2000. In March 2003, both applicants agreed to the conditions of the use permit and continued their leases with Arlington County to use the Lee Pumping Station for five (5) additional years.

The review was deferred twice from the January 29, 2005, and March 12, 2005, County Board meetings. The first time was because the annual emissions report required by Condition #2 was not received by either County staff or the civic associations in 2004. Staff contacted the applicant requesting the report and the applicant conducted measurements in the vicinity of the station in late January 2005. The field strength exposures throughout the neighborhood were less than 0.25 percent of the maximum permissible exposures specified by the Federal Communications Commission for the general public. The review was deferred at the March 12, 2005, County Board meeting in order to respond to complaints raised by two nearby neighbors

County Manager: \_\_\_\_\_

Staff: Lorrie Pearson, DCPHD, Planning Division

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concerning electronic interference and to correct the number of antennas referenced in the staff report. The applicant worked with the neighbors after the meeting and conducted field research. Their studies concluded that there is no direct correlation between Sprint's antennae on the water tower and the interference the neighbors claimed. The neighbors confirmed with staff that they were satisfied with Sprint's explanation.

The use was to be reviewed by the County Board on April 22, 2006. However, the applicant had not submitted the required annual field measurements. The review was deferred to the July 8, 2006, County Board meeting.

**DISCUSSION:** In March 2006, Sprint submitted a mathematical assessment of potential human exposure to radio frequency fields emanating from the antennae. However, the report required by Condition #2 is an annual field measurement, not an assessment of potential exposure. The correct report was submitted in time for this review. The report shows that field measurements of radio frequency exposure were conducted and found to be 200 times below the level the FCC considers safe for continuous exposure.

**Since the last County Board Review (April 16, 2005):**

Use Permit Conditions: The applicant has come into compliance with the conditions by submitting an up-to-date emissions report.

Community Code Enforcement: The Code Enforcement Office reports that there were no violations associated with the site and has no objection to the renewal of this use permit.

Emergency Communications Center: The ECC reports no issues with the use permit.

Civic Associations: Staff contacted the Old Dominion and Donaldson Run Civic Associations. Both associations report no objection to renewing the use permit, subject to the applicant providing the emission reports annually and maintaining a one (1) year review period to ensure the reports are submitted.

**CONCLUSION:** The applicant has submitted the required field measurement, which shows that the emissions are well below the limits. Therefore, staff recommends the use permit be renewed, subject to all previous conditions, with revised Condition #2, and with a review by the County Board in one (1) year (July 2007). The revised Condition #2 sets a deadline for the submission of the annual report as June 1 of each year.

Condition #2

2. The electromagnetic emissions from APC's antennae shall at all times comply with the ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 KHz to 300 GHz, as adopted by the Federal Communications Commission in its Second Order and Report on Personal Communications Systems (Adopted: September 23, 1993 in Docket 90-314). APC agrees to have an independent engineering firm conduct, at its sole costs and expense, field measurements of its electromagnetic emissions. The first test shall be conducted

within 30 days after APC's equipment is installed and becomes operational. Thereafter, the test shall be conducted annually from the approval date of the special exception use permit (January 7, 1995). True and correct copies of the field measurement, certified by an engineer licensed to practice in the Commonwealth of Virginia, shall be submitted to the Zoning Administrator, the Presidents of the Donaldson Run and Old Dominion Civic Associations, and the Director of the Emergency Communications Center within 30 days of the test completion no later than ~~December 31<sup>st</sup>~~ June 1<sup>st</sup> of each year. If at any time APC's operations cause it to exceed the standards set forth in the above ANSI standard, then APC agrees to immediately cease operations until the violation can be corrected. APC agrees not to continue operations until such time as the system is operating within the applicable standard.

PREVIOUS COUNTY BOARD ACTIONS:

- November 19, 1994                      Deferred the consideration of use permit (U-2832-94-4) to January 20, 1995 County Board meeting.
- January 7, 1995                              Approved use permit (U-2832-94-4) for installation of six panel antennae not exceeding 54 inches in length by 9 inches in width on the existing water tower and two equipment cabinets, subject to conditions with a review in one (1) year (January 1996).
- January 20, 1996                             Renewed use permit (U-2832-94-4) for operation of six panel antennae on the existing water tower and two equipment cabinets, subject to all previous conditions with a review in three (3) years (January 1999).
- January 27, 1999                             Renewed use permit (U-2832-94-4) for operation of six panel antennae on the existing water tower and two equipment cabinets, subject to all previous conditions and a revised Condition #2, with a review in three (3) years (January 2002).
- January 26, 2002                             Renewed use permit (U-2832-94-4) for operation of six panel antennae on the existing water tower and two equipment cabinets, subject to all previous conditions and a revised Condition #2, with a review in three (3) years (January 2005).
- January 29, 2005                             Deferred use permit (U-2832-94-4) review to the March 12, 2005 County Board meeting.
- March 12, 2005                                Deferred use permit (U-2832-94-4) review to the April 16, 2005 County Board meeting.
- April 16, 2005                                Renewed use permit (U-2832-94-4) for operation of six panel antennae on the existing water tower and two equipment cabinets, subject to all previous conditions, with a review in one (1) year (April 2006).
- April 22, 2006                                Deferred use permit (U-2832-94-4) review for operation of six panel antennae on the existing water tower and two equipment cabinets to July 8, 2006.

Approved Conditions:

1. The applicant, American Personal Communications (APC), agrees to limit the number of antennae to six (6) panel antennae (not to exceed 54 inches in length by 9 inches in width). All antennae shall be mounted on the catwalk railing of the water tower and shall be painted to match the color of the tank. No antennae are to be installed on the top of the tank or on the tank's legs or support structure.
2. The electromagnetic emissions from APC's antennae shall at all times comply with the ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 KHz to 300 GHz, as adopted by the Federal Communications Commission in its Second Order and Report on Personal Communications Systems (Adopted: September 23, 1993 in Docket 90-314). APC agrees to have an independent engineering firm conduct, at its sole costs and expense, field measurements of its electromagnetic emissions. The first test shall be conducted within 30 days after APC's equipment is installed and becomes operational. Thereafter, the test shall be conducted annually from the approval date of the special exception use permit (January 7, 1995). True and correct copies of the field measurement, certified by an engineer licensed to practice in the Commonwealth of Virginia, shall be submitted to the Zoning Administrator, the Presidents of the Donaldson Run and Old Dominion Civic Associations, and the Director of the Emergency Communications Center within 30 days of the test completion no later than December 31<sup>st</sup> of each year. If at any time APC's operations cause it to exceed the standards set forth in the above ANSI standard, then APC agrees to immediately cease operations until the violation can be corrected. APC agrees not to continue operations until such time as the system is operating within the applicable standard.
3. APC agrees to limit its use of the Lee Pumping Station to personal communications services operating within its FCC license.
4. APC agrees to limit access to the Lee Pumping Station site to bi-monthly maintenance and repair of equipment. Service vehicles shall be limited to vehicles no larger than a one (1) ton truck or van.
5. APC and County representatives, at APC's sole expense, shall make yearly inspections of APC's antenna mounts and other equipment installation to ensure the antennae and equipment are installed in accordance with the plans and specifications approved by the County. APC agrees to immediately repair any deficiencies found.
6. APC agrees to remove any equipment not in use or operation from the water tower.
7. APC agrees to install its equipment and antennae and to complete the relocation of County equipment, as provided for in the Lease Agreement, within 20 working days after commencement of the work. APC agrees to limit work to Mondays through Fridays from 8:00 a.m. to 6:00 p.m.

8. APC shall establish and identify a liaison who shall be available to address any concerns regarding its operations at the Lee Pumping Station. The name and telephone number of the liaison shall be sent to the Donaldson Run Civic Association and the Old Dominion Civic Association and to the Zoning Administrator.