

ENVIRONMENTAL STUDY

**PARAMOUNT STATIONS GROUP OF PHILADELPHIA, INC.
STATION WPSG-DT PHILADELPHIA, PENNSYLVANIA
CH 32 250 KW (MAX-DA, BT) 400 METERS**

Paramount Stations Group of Philadelphia, Inc. (herein after Paramount) proposes to operate the digital television (DTV) facilities of WPSG-DT, channel 32 (578 to 584 megahertz (MHz)), Philadelphia, Pennsylvania, on a new tower at an existing multiple use transmitter site located at geographic coordinates 40° 02' 30" North Latitude, 75° 14' 11" West Longitude (referenced to 1927 North American Datum), using a horizontally polarized directional antenna, 250 kilowatts (kW) maximum average effective radiated power (ERP), and 400 meters antenna radiation center height above average terrain. The proposed WPSG-DT antenna radiation center is 376 meters above ground level (AGL).

Public access to the WPSG-DT antenna and supporting structure will be restricted by a gated and locked, two-meter chain link fence topped with barbed wire. There will be no casual or inadvertent access to the WPSG-DT transmitter site by the general public.

An analysis has been made of the human exposure to RFR using the calculation methodology described in *OET Bulletin 65, Edition 97-01*, prepared by the FCC Office of Engineering and Technology. A conservative vertical plane relative field factor of 0.14, obtained from the manufacturer's theoretical vertical plane radiation pattern for the WPSG-DT, Dielectric Communications, type TFU-24DSB-M (C), transmitting antenna, was used in the calculation of the WPSG-DT power density. The WPSG-DT average ERP of 250 kW was used in the calculation of WPSG-DT power density. To account for ground reflections, a coefficient of 1.6 was included in the calculation. The WPSG-DT power density calculations reported herein were made at 578 MHz, the lower edge of the WPSG-DT channel.

The FCC maximum permissible exposure (MPE) limit for general population/uncontrolled exposure is 0.39 milliwatt-per-square-centimeter (mW/cm²) at 578 MHz. The FCC MPE limit for occupational/controlled exposure is 1.93 mW/cm² at 578 MHz. At a reference point two meters AGL at the base of the WPSG-DT supporting structure, the calculated WPSG-DT power density is 0.0012 mW/cm², which is 0.30 percent of the FCC MPE limit for general population/uncontrolled exposure, and 0.06 percent of the FCC MPE limit for occupational/controlled exposure.

Pursuant to the provisions of *OET Bulletin 65, Edition 97-01*, at multiple-user transmitter sites, only those licensees whose transmitters produce power density levels in excess of 5.0 percent of the applicable exposure limit are considered “significant contributors” and share responsibility for actions necessary to bring the local RFR environment into compliance with FCC exposure limits. Since the WPSG-DT operation will contribute less than 5.0 percent of the most restrictive permissible exposure at any location on the ground at the multiple-user site, WPSG-DT is not considered a “significant contributor” to the local RF exposure environment and contributions to exposure from other sources in the vicinity of WPSG-DT were not taken into account in this analysis.

While not a “significant contributor” to the exposure levels at any location on the ground, the WPSG-DT operation will be a “significant contributor” to exposure at locations on the supporting structure near the WPSG-DT transmitting antenna. If work is done on the tower in an area where overexposure could occur, Paramount will take all actions necessary to prevent the overexposure of workers on the tower, including reducing WPSG-DT transmitter power or ceasing WPSG-DT operation completely. Additionally, Paramount will cooperate with all other site users to assure that work is performed at the site without exceeding the FCC MPE limit for occupational/controlled exposure.

The instant proposal is categorically excluded from environmental processing since none of the conditions of Sections 1.1306(b)(1), (2), or (3) of the FCC Rules would be involved for the following reasons:

1. The proposed WPSG-DT channel 32 DTV tower is located in a existing multiple use communications site.

2. The provision of Section 1.1306(b)(2) of the FCC Rules relating to the use of high-intensity strobe lighting does not apply since the proposed supporting structure is located at an existing multiple use communications site where similarly lit towers are located.

3. Finally, with regard to RFR exposure concerns, compliance with applicable FCC MPE limits will be demonstrated by measurement and maintained through cooperation with other users at the site.