

**ENVIRONMENTAL STUDY**

**VIACOM BROADCASTING ASSOCIATES OF SEATTLE  
STATION WUPL-DT SLIDELL, LOUISIANA  
CH 24 1000 KW (MAX-DA, BT) 272 METERS**

Viacom Broadcasting Associates Of Seattle (herein after Viacom) proposes to operate the digital television (DTV) facilities of WUPL-DT, channel 24 (530 to 536 megahertz (MHz)), Slidell, Louisiana, at an existing transmitter site located at geographic coordinates 29° 55' 11" North Latitude, 90° 01' 29" West Longitude (referenced to 1927 North American Datum), using a horizontally polarized directional antenna, 1000 kilowatts (kW) maximum average effective radiated power (ERP), and 272 meters antenna radiation center height above average terrain. The proposed WUPL-DT antenna radiation center is 273 meters above ground level (AGL).

Public access to the WUPL-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 WUPL-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 0.1, obtained from the manufacturer's theoretical vertical plane radiation pattern for the WUPL-DT, Dielectric Communications, type TUD-C5-10/40H-1-B, transmitting antenna, was used in the calculation of the WUPL-DT power density. The WUPL-DT average ERP of 1000 kW was used in the calculation of WUPL-DT power density. To account for ground reflections, a coefficient of 1.6 was included in the calculation. The WUPL-DT power density calculations reported herein were made at 530 MHz, the lower edge of the WUPL-DT channel.

The FCC maximum permissible exposure (MPE) limit for general population/uncontrolled exposure is 0.35 milliwatt-per-square-centimeter (mW/cm<sup>2</sup>) at 530 MHz. The FCC MPE limit for occupational/controlled exposure is 1.77 mW/cm<sup>2</sup> at 530 MHz. At a reference point two meters AGL at the base of the WUPL-DT supporting structure, the calculated WUPL-DT power density is 0.0045 mW/cm<sup>2</sup>, which is 1.29 percent of the FCC MPE limit for general population/uncontrolled exposure, and 0.25 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 WUPL-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, WUPL-DT is not considered a “significant contributor” to the local RF exposure environment and contributions to exposure from other sources in the vicinity of WUPL-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 WUPL-DT operation will be a “significant contributor” to exposure at locations on the supporting structure near the WUPL-DT transmitting antenna. If work is done on the tower in an area where overexposure could occur, Viacom will take all actions necessary to prevent the overexposure of workers on the tower, including reducing WUPL-DT transmitter power or ceasing WUPL-DT operation completely. Additionally, Viacom 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 WUPL-DT channel 24 DTV tower is an existing supporting structure located in a 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 no changes are proposed in the existing supporting structure obstruction lighting.

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.