

WDVX (FM) Radio – Clinton, Tennessee  
Cumberland Communities Communications Corporation.  
RF Hazard Measurements  
Cross Mountain, Tennessee Site

June 2, 2011

EME Communications has been retained by CCCC to perform real time measurements to ascertain the level of compliance for the shared tower site and to show permissible exposure levels for occupational controlled and non-controlled access to the tower site and surrounding buildings.

The three (3) towers are located in relative proximity to each other and are somewhat short. The ERP and antenna HAGL of the stations involved are as follows.

WDVX – ERP- .2 kW(200 watts) - Antenna HAGL – 21 meters (69 feet)

WNOX – EPR – 100 kW – Antenna HAGL – 30 meters (98 feet)

WPXK-TV Channel 23 – ERP 18 kW – Antenna HAGL – 21 meters (69 feet)

NOAA WX Radio – WNG-732 – 300 watts – HAGL unknown.

Measurements were conducted employing a Narda EMR-20C Electromagnetic Radiation Meter (SN AZ-0098) and a Narda E Field probe type 8.3 (SN BC-9997). The instrument measures the E field intensity over a frequency range of 100 KHZ to 3.0 GHz using the isotropic probe minimum detectable power levels of 0.0001 mW/cm<sup>2</sup>. Both instruments were calibrated in December 2009 in compliance with ISO 9001 and ISO 10012-1 standards.

All the transmitters were believed to be operating at full power output at time of the measurements but were not confirmed because of the lack of access to each site. The WDVX transmitter was operating at its full power output as outlined in the underlying construction permit.

Levels of 1000 uW/cm<sup>2</sup> per occupational **controlled** exposure and 200 uW/cm<sup>2</sup> for the **uncontrolled** public exposure were employed. Measurements were made in both the normal sample and peak hold sample modes. The area at the (1) front driveway site access, the gate entrance (2) for WNOX-FM, the front entrance gate (3) for WPXK (TV), the front entrance gate (4) for WDVX and (5) inside the WDVX transmitter enclosure were all measured.

These measurements were made by slowly sweeping the probe from ground level to a height of 2 meters above ground level. The measurements were taken on June 2, 2011 between 12:40 and 1:00 PM.

The maximum observed power per unit is outlined below:

1 - 330 uW/cm<sup>2</sup> - 33 % of max for controlled environment

2 – **550 uW/cm<sup>2</sup> - 55 % of max for controlled environment (Highest level measured)**

3 – 300 uW/cm<sup>2</sup> - 30 % of max for controlled environment

4 – 300 uW/cm<sup>2</sup> - 30 % of max for controlled environment

5 - 250 uW/cm<sup>2</sup> - 25 % of max for controlled environment

The total exposure levels for sites never exceed the maximum for the controlled but do exceed the levels allowed for the uncontrolled area. Therefore and as a precaution, the area at the access gate to the site will be designated a “transmitter off” area. There are several signs on all the fences that are employed at this site that warn of the possible dangers to RF exposure.

Also offered as exhibit 1 is a plot showing the nearest fulltime occupied housing unit is 1.72 kilometers (using the 2010 census data) away from the WDVX transmitting antenna.

On the basis of the actions taken by the applicant it was determined that CCCC, (WDVX) facilities are in compliance with the current FCC rules regarding human exposure to RF radiation at ground level

Clyde Scott, Jr.  
EME Communications  
293 JC Saunders Road  
Moultrie, GA 31768-0349  
229-890-2506

**EME Communications - Moultrie, GA - USA**

WDVX.C

BPED20090626AAH

Latitude: 36-11-53 N

Longitude: 084-13-51 W

ERP: 0.20 kW

Channel: 210

Frequency: 89.9 MHz

AMSL Height: 1089.0 m

Elevation: 1068.0 m

Horiz. Pattern: Omni

EXHIBIT 1

