

ENVIRONMENTAL STATEMENT  
WKHF LYNCHBURG, VIRGINIA  
UNITED STATES CP, LLC  
FCC FORM 349  
MARCH 2011

The applicant proposes mounting a new antenna on an existing registered tower, FCC registration number 1215021. The proposed Center of Radiation will be 23 meters Above Ground Level. A 2 bay, circular polarized Nicom model BKG-77/2L, with 0.9 wavelength spacing between the two bays non-directional is proposed. Calculations were made using FM Model for Windows, version 2.10. The proposed antenna Center of Radiation, above ground, was reduced by 2 meters to allow for the average height of a human on the ground. Since the Nicom antenna is not specifically listed, the worse case Type 1 was utilized. FM Model predicts a peak exposure of  $125.7053 \mu\text{w}/\text{cm}^2$  at a distance of 4 meters from the base of the tower. This represents 62.9% of the allowable Maximum Permissible Exposure (“MPE”) of  $200 \mu\text{w}/\text{cm}^2$  for uncontrolled environments at any point on the ground.

There are three other FM services licensed at this site. There is also a Construction Permit for K229AE Lynchburg, VA authorized to use this same tower site.

The services are:

- 1) WWMC Lynchburg, Virginia, facility ID 37248, operation on channel 215A, with 0.1 kilowatts Effective Radiated Power with an antenna mounted at 10 meters above the ground on the tower. There are no CDBS records that list the type of antenna that WWMC is utilizing, however even when worse case assumptions are made, or an FM Model “Type 1” one bay antenna is proposed,

the maximum peak exposure that could be generated by WWMC would be 62.71  $\mu\text{w}/\text{cm}^2$  at 2 meters from the base of the tower. Even if this were directly added to the power density of WKHF, the total would be 188.42  $\mu\text{w}/\text{cm}^2$ , or less than the 200  $\mu\text{w}/\text{cm}^2$  maximum allowable in un-controlled areas.

- 2) K280DB Lynchburg, VA, facility ID 79178, operates with only 10 watts ERP, thus is categorically exempt from environmental processing.
- 3) K237CL Lynchburg, VA, facility ID 147666, operates with only 10 watts ERP, thus is categorically exempt from environmental processing.
- 4) K229AE(CP) Lynchburg, VA, facility ID 81119, is proposing to operate with only 10 watts ERP, thus is categorically exempt from environmental processing.

The applicant will ensure that the public access to the tower is restricted by fencing, anti-climb devices or other appropriate measures. The site will be posted with RF warning signs. If climbing of the tower by authorized personnel becomes necessary, transmitter power will be reduced to safe operating levels, or transmission even terminated, as necessary as not to exceed the RF exposure limits to tower workers. The licensee will cooperate with other users at the site with the scheduling of such tower or antenna maintenance.

No modification of the existing tower is proposed, other than the proposed side mounting of the antenna system and addition of a transmission line. The tower was constructed prior to March 16, 2001. The National Programmatic Agreement generally allows such a collocation without consultation or review under Section 106 and Subpart

B of 36 CFR §800. The applicant believes that it is in full compliance with the Agreement, and that no further study is required.