

W20DE-D, Birmingham, AL
Facility ID# 61208
18 November, 2020

Environmental Statement

The proposed construction is not a major environmental action as defined by 47CFR 1.1306 and 1.1307. No new ground construction or lighting changes are involved and no structure heights or widths are being increased.

RF exposure summary:

This tower site is restricted from public access by a tall fence around the entire property with a very heavy steel road gate block to vehicular ingress. The tower itself is also surrounded by a high fence to which only authorized users have the combination, preventing any public access. The gate and the tower are posted with registration and RF caution signs and the one entrance gate is the only means of access. The proposed construction is on an existing registered broadcast tower with no other broadcast operations located on it.

The existing and proposed W20DE-D antenna center is at 106 meters AGL. The proposed horizontal ERP of 15.0 kW with 30% vertical totals 21.43 kW. Using the general exposure formula $S = (.256)(1.64)(100)(F2) (ERP)/4\pi R^2$, with a worst case antenna factor of 1.0 yields a power density at ground level of 6.4 $\mu\text{watts}/\text{cm}^2$, far below the occupational limit for channel 18 of 1657 $\mu\text{watts}/\text{cm}^2$ and the public exposure limit of 331 $\mu\text{watts}/\text{cm}^2$. Thus the proposed construction would contribute an insignificant amount of RF energy at the level of a person standing on the ground. The existing W20DE signal on channel 20 will be removed in this process so the above is a negligible increase over existing levels.

An information sign at the site lists contact information a crew can use to have W20DE-D emissions reduced or terminated to protect tower crews working in the vicinity of the antenna.

These facts clearly demonstrate that this application does not present any significant environmental action or hazard as defined in the FCC Rules and Regulations Part 1 and outlined in OET bulletin 65 & 65a.