



Engineering Report

JOSEPH W. & DONNA M. BOLLINGER
KHCR - Bismarck, MO

This consultant has been retained by Joseph W, & Donna M. Bollinger (Bollinger) permittee of KHCR (FM), for the purpose of preparing the technical portion of Form 301 in application for a modification to the KHCR facilities. Specifically, Bollinger proposes to relocate KHCR to a new tower site. The site elevation is significantly higher at the proposed new tower site hence the antenna height and effective radiated power change as well.

Bollinger has located an ideal transmitter site for the KHCR operation. The proposed site is fully compliant with the minimum spacing requirements of 47 CFR 73.207 and the proposed operation illuminates the entire community of Bismarck, MO with a signal well in excess of the 70 dBu minimum set forth in 47 CFR 73.315. Exhibit 1 of this report is a digitally generated map which shows the predicted service contours for the proposed operation as well as the city limits of Bismarck, MO. Exhibit 2 is a search of the Commission's CDBS database which shows compliance with the minimum spacing requirements.

The proposed KHCR operation specifies an antenna height above average terrain well in excess of 100 meters and, as such, the station ERP was adjusted down to 4.2 kW so as to equal the 39.1 km distance to the 60 dBu contour of a model class C3 operation.

Form 7460-1 has been filed with the FAA and, upon the receipt of the No Hazard determination the tower will be registered via Form 854R and this application will be amended to reflect that registration number.

Environmental Issues

Exhibit 3 of this report is a worst case analysis of Non Ionizing RF Radiation which demonstrates that the proposed operation will pose no environmental risk to persons at ground level. As shown in Exhibit 3, the maximum possible power density at ground level is 0.0308 mW/cm² which is well below the 0.2 mW/cm² maximum set forth in OST Bulletin number 65. This analysis was based on 100% downward radiation for the worst case assumption. Further precautions to protect the public and tower workers will be put in place as well. The tower will be surrounded with a security fence and the site will be posted with signs warning of hazards due to High Voltage and RF Radiation. The licensee further pledges to reduce power or cease operation during periods of tower maintenance so as to not endanger any tower workers.

Certification

All information in this report and its associated exhibits is true and accurate to the best of my belief. Having had numerous matters before the Commission, my qualifications are a matter of record.

July 14, 2004

Date

R. Lee Wheeler

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