

**ENGINEERING REPORT
MINOR CHANGE APPLICATION**

For FM Station

**KUQL(FM) – CH252C1 – 98.3 MHz
File No. BLH-19981127KB**

Minor Change in Community from
Wessington Springs, SD to Ethan, SD

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(Exhibit Numbering is in response to FCC Online Form 301, Section III-B)

DISCUSSION OF REPORT

This firm was retained to prepare the required engineering report in support of a minor change for FM Station KUQL(FM), Wessington Springs, SD, License BLH-19981127KB. KUQL(FM) is currently licensed to operate with 100.0 kW ERP (H)&(V) at 274 m HAAT as a Class C1 facility on CH252C1, 98.3 MHz. A sole change in communities of license from Wessington Springs, SD to Ethan, SD is requested. While no technical facility modifications are proposed, a correction in coordinates of five (5) seconds latitude and five (5) seconds longitude and a correction of overall tower height are requested to match existing Antenna Structure Registration data. The facility will continue to operate with 100.0 kW (H)&(V) at a corrected 273 meters HAAT but serve the community of Ethan, SD.

The existing KUQL(FM) facility is presently a §73.207 fully spaced facility and will remain unchanged as no technical facility modifications are proposed other than a sole change in communities of license. The existing operating site meets all the spacing requirements of 47 C.F.R. §73.207 toward other stations in the allocation as noted in **Exhibit 26.1**.

The existing fully spaced operating site will also serve as the fully spaced allotment special reference point for this proposal. The existing operating site provides city grade service to the new proposed community of license and is within the 50.0 km Principal Community Coverage Contour arc as noted in **Exhibit 24.1**. This exhibit also demonstrates the former and proposed communities of license do not reside within an urbanized area.

The proposed service contours have been calculated in accordance with the Rules, and the data obtained has been tabulated and plotted in this report. The plotted contours are found as **Exhibit 24.1** of this report. This exhibit shows the 70 dBu contour which serves 100.0% of the new community of license, and the overall service provided by the 60.0 dBu contour of the facility. The tabulation of the distances to the respective contours shown in this discussion is based on the use of the standard eight cardinal bearings, which were also used for the computation of the HAAT. However, the plotted contours shown in **Exhibit 24.1**, are based on the use of a full 360 terrain radials. The USGS 03 second terrain database has been used in calculation of both HAAT and contour distance computations.

The existing antenna will remain unchanged on the present tower bearing Antenna Structure Registration No. 1042105. ASR information is a matter of public record before the Commission.

The remainder of the information in this report and exhibit numbering is responsive to the Rules of the Commission, and provides the data for FCC Online Form 301, Section III-B.

DISCUSSION OF REPORT (continued)

RADIATION PROTECTION: The Commission requires an engineering study regarding compliance with the guidelines for human protection from radiofrequency radiation. This report section is in response to that provision of the Rules. The current Federal Communications Commission guidelines for RF radiation protection are set forth in OET Bulletin No. 65 (Edition 97-01), and the accompanying Supplement A, (Edition 97-01).

The FM Broadcast facility proposed in this application will not produce human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1307(b)(3) of the Commission's rules concerning 5% contributors. **Exhibit 31.1** provides the details of the study that was made to demonstrate compliance. The facility is properly marked with signs, and entry is restricted by means of fencing with locked doors and/or gates. Any other means as may be required to protect employees and the general public will be employed.

In the event work would be required in proximity to the antenna such that the person or persons working in the area would be potentially exposed to fields in excess of the guidelines set forth in OET Bulletin No. 65 (Edition 97-01), the transmitter power will be reduced or the station will cease operation during the critical period.

This instant application proposes a change in communities of license, therefore Section 307(b) showings have been provided. As this application proposes solely a change in communities of license with no physical changes in the existing operating parameters, there will be no change to the licensed 60 dBu and 70 dBu service contours. A service contour map was previously supplied in **Exhibit 24.1**. The existing and proposed communities are presently licensed with the aural stations as noted in **Exhibit 32.1**.

The former and proposed communities of license are considered fully served with no less than five (5) services as noted in **Exhibit 32.2**. A complete listing of all services will be supplied upon request.

The Ethan, SD community boundaries shown here-in have been taken from US Census 2000 datum as shown in **Exhibit 24.1**. Ethan, SD appears in the U.S. Census 2000 count as a city with a population of 330. Information concerning the viability of Ethan, SD as a licensable community has been addressed in **Exhibit 32.1**.