

## ENGINEERING REPORT

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### Eagle Lake, TX, Channel 237C3 FM Application

#### EXHIBIT 35 - ENVIRONMENTAL STATEMENT

The proposed antenna is being side-mounted at an existing communications tower. Therefore, pursuant to 47 CFR Section 1.1306, Note 1, this proposal is categorically excluded from the provisions of 47 CFR Section 1.1307(a). (47 CFR Section 1.1307(a)(4) is not applicable to this proposal.)

This FM station proposal specifies an ERP that is less than or equal to 25 kilowatts (peak). Assuming: (a) a maximum ERP of 25 kilowatts and circular polarization (for a total ERP of 50 kW); (b) a relative field of less than 0.2 in the critical downward angles; and (c) a distance of at least 64 meters from the lowest antenna element to 2 meters above ground level, the maximum power density is calculated as follows:

$$S = 33.4 (F)(F)(ERP) / [(R)(R)]$$

Where, S equals power density in uW/cm<sup>2</sup>  
F equals the relative field factor  
ERP equals the effective radiate power in watts  
R equals the distance in meters

$$= 33.4 (0.2)(0.2)(50,000) / [(64)(64)]$$

$$= 16.3 \text{ uW/cm}^2$$

16.3 uW/cm<sup>2</sup> represents less than the uncontrolled power density limit (200 uW/cm<sup>2</sup> for FM). The electromagnetic radiation from this proposed operation will not produce a value in excess of the radiation standard. The electromagnetic radiation from the proposed operation will not combine with other facilities on or near the structure to produce a significant change in value.

If this is a structure that may support various other operations, the applicant will cooperate with the other operators in establishing a plan for work done on the structure in close proximity to the existing antenna.