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Prepared for Adventist Radio Alaska Corporation
New Station, Togiak, Alaska

RADIOFREQUENCY FIELDS

An engineering analysis was performed to determine whether the facilities proposed herein comply with the Maximum Permissible Exposure standards outlined in 47CFR1.1310 as regards human exposure to radiofrequency electromagnetic fields and whether environmental processing would be required.

The applicant proposes to operate at 0.090 kilowatts, circularly polarized, using a Bext TFC2K-1 antenna mounted at the 10-meter level of an existing 11-meter tower. This antenna consists of a single radiating element.

The antenna support structure is bracketed to the Togiak, Alaska, Adventist Church building. This is a single-story building at grade. Access to the roof is by ladder only. There are no other significant emitters of radiofrequency energy in the immediate vicinity nor any other buildings taller than single story.

The Commission's FMModel computer software was used to calculate the radiofrequency electromagnetic power density in a plane 2 meters AGL as a function of the distance from the antenna support structure. A copy of the graphical output of this program is attached.

The Bext TFC2K is electrically identical to the Jampro Penetrator style element, which elevation pattern data was used.

equal to 25.8 $\mu\text{W}/\text{cm}^2$. This represents 12.9% of the general public/uncontrolled MPE standard.

Appropriate signs will be installed on all four sides of the building at eye level warning workers and others that the maximum permissible exposure standard may be exceeded at locations on the roof.

The applicant believes that the facilities proposed herein conform to the MPE standards outlined in 47CFR1.1310 and that environmental processing is not warranted.

