

# EXHIBIT 17-A

## Human Exposure to Radiofrequency Electromagnetic Field & Section 106 Compliance (Environmental)

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. 1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. Farmworker Educational Radio, Inc. seeks a new FM translator at Buckeye, AZ. The FM translator will simulcast co-owned Class B AM primary station KNAI 860 kHz, Facility ID No. 1326, Phoenix, AZ. The tower is located at 33° 34' 12" N ~ 112° 33' 41" W (NAD 27). The tower is 55 meters in overall height and is not registered with the FCC's Antenna Registration Structure system. The antenna is a side mounted Kathrein-Scala CL-FM two antenna stacked array with quarter wave offset (reduced rear model) with a center of radiation of 36 meters AGL and 716 meters HAAT. The new FM translator will operate with 250 watts ERP directional with vertical polarization. The antenna array will be oriented at 203 degrees true azimuth. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of § 1.1306 of the FCC Rules. Because the proposed new facility proposes to operate from an existing tower, is exempt from a Section 106 review by the SHPO/THPO.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. The Kathrein-Scala antenna is not included in the recently revised OET FM Model Program. Therefore the study was done using EPA Type 1, "Ring and Stub" or other. Using the Type 1 antenna, the maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is  $6.89 \mu\text{W}/\text{cm}^2$  at 7.8 meters, which is 3.44 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in 1.1307(b) regarding sites with multiple emitters, which excludes applicant from responsibility for taking any corrective action in areas where the proposal's contribution is less than five percent.

The applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.