

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

Southwest FM Broadcasting Co., Inc ("Southwest") is the licensee of KAHM Channel 271C (Facility ID# 61510) licensed to Prescott, AZ. Southwest wishes to modify KAHM construction permit BPH-20100813BHN. The proposed transmit location is an existing tower site located at 34-14-03 N ~ 112-22-01 W (NAD 27). The tower is 199 feet (61 meters) above ground level is not registered with Antenna Registration Structure "ASR" number. The proposed transmit antenna is a side mounted ERI Model SHPX-5 five bay 0.85 wave length with a center of radiation of 53 meters AGL. KAHM will operate with 25.5 kW ERP directional at 852 meters HAAT. 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 KAHM is locating to 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 ERI antenna is included in the recently updated OET FM Model for Windows Program under Type 3 Opposed "U" dipole. The maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $7.95 \mu\text{W}/\text{cm}^2$ at 35 meters, which is 3.98 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.