

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

Stereo 93, Inc, ("Stereo 93"), is the licensee of KISR Channel 229C, Facility ID# 63336, licensed to Fort Smith, Arkansas. Stereo 93 is filing this minor modification application Form 301 to specify operation on Channel 229C1 from a different transmitter site. The proposed transmitter site is an existing tower. KISR will operate with a 8 bay full wave side mounted ERI Model SHPX-8C antenna with a center of radiation of 153 meters AGL. KISR will operate with 83.0 kW @ 324 meters HAAT.

The application site tower is registered with Antenna Structure Registration "ASR" No. 1038012 and is 153 meters (501.8 feet) in overall height. The application site coordinates are 35 degrees 42 minutes 35.7 seconds North Latitude, 94 degrees 8 minutes 15.3 seconds West Longitude (NAD 27). The existing tower is being modified and increased in overall height by 12.2 meters (40 ft.) to an overall height of 165.2 meters (541.9 ft.) This tower was constructed prior to March 16, 2001. Section I(c) 1-3 of the Nationwide Programmatic Agreement states that a modification of a tower represents a substantial increase in the size of the tower and requires a Section 106 review by the SHPO/THPO if;

(1) The height of the tower will be increased by more than the greater of: (a) 10% of the height of the tower; or (b) the height extension needed to accommodate one additional antenna array with a separation of 20 feet from the nearest existing antenna. Thus, a 150 foot tower may be increased in height by up to 15 feet without constituting a substantial increase in size. If there is already an antenna at the top of the tower, the tower height may be increased by up to 20 feet plus the height of a new antenna to be located at the new top of the tower.

Environmental Corporation of America will conduct a Limited FCC NEPA Checklist - Co-location with Proposed Tower Extension to determine if the proposed modification meets the criteria for Programmatic Agreement Eligibility for Towers Built on or before March 16, 2001.

The proposed modification would increase the overall tower height by 40 feet, which is 7.97 percent of the current overall height tower height. Therefore it is believed that the proposed forty feet increase in height being made to the tower is exempt from a Section 106 review by the SHPO/THPO.

The proposed KISR operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. Using the FM Model for Windows the maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $14.20 \mu\text{W}/\text{cm}^2$, at 41 meters, which is 7.10 percent of the general population/uncontrolled maximum permitted exposure limit and 1.42 percent of the limit for "controlled" environments.

The following broadcast stations operates from this tower:

KFTA-DT Channel 27 Fort Smith, AR Facility ID# 29560

KFTA-DT operates with 600 kilowatts at 305 meters HAAT. KFTA-DT broadcasts with a Dielectric, Type TFU-24DSB-R CT150 (C) SP, horizontally polarized antenna with 0.75E electrical beam tilt with a center of radiation of 124.5 meters AGL.

The KFTA-DT operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. KFTA-DT contributes less than 0.0223 mW/cm² at 2 meters above ground. The limit for an uncontrolled environment is $f/1500$ for station broadcasting on 551 MHz. $(551 \text{ MHz})/1500 = 0.367 \text{ mW/cm}^2$ is the RFF limit for KFTA-DT. Therefore:

KFTA-DT DTV facility contributes less than 6% RFF for an uncontrolled environment two meters above ground at tower site.

<u>CALL</u>	<u>Channel/Class</u>	<u>Polarity</u>	<u>Antenna AGL</u>	<u>ERP kW</u>	<u>% of Uncontrolled Limit</u>
KISR	229C1	H&V	153.0 meters	84.0	7.10
KFTA-DT	27	H	124.5	600.0	<u>6.00</u>
Total of ANSI "Uncontrolled" value					13.10 %

The applicant will see that signs are posted at all entry points onto the property and 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.