



**FCC FORM 301, EXHIBIT 31
ENVIRONMENTAL ASSESSMENT
APPLICATION FOR
CONSTRUCTION PERMIT
CHAPIN ENTERPRISES, LLC
STATION KRKR(FM) VALLEY, NEBRASKA
CH 235A 6.0 KW (H&V) 100 METERS**

This environmental assessment was prepared on behalf of Chapin Enterprises, LLC (hereinafter Chapin) licensee of commercial FM station KRKR, Lincoln, Nebraska, (Facility ID: 54707) in support of a FCC Form 301 minor change application for construction permit.

KRKR is licensed (FCC File Number BLH-19880609KA) to operate on channel 236C2 (95.1 megahertz (MHz)) using a nondirectional antenna, effective radiated power (ERP) of 50 kilowatts (kW), circularly polarized, and antenna radiation center height above average terrain (HAAT) of 87 meters. The instant application proposes to delete channel 236C2 at Lincoln, Nebraska, and to add channel 235A to Valley, Nebraska, as that community's first local service, to relocate KRKR to a new transmitter site located 53 kilometers northeast of the licensed site, reduce the ERP to 6.0 kW, and



increase the antenna radiation center HAAT to 100 meters.¹ The proposed antenna radiation center height is 88 meters above ground level.

Public access to the multiple user communications site in which the proposed KRKR antenna and supporting structure will be located is only accessible by authorized personnel.

ENVIRONMENTAL ANALYSIS

KRKR, VALLEY, NEBRASKA

An analysis has been made of the human exposure to Radio Frequency Radiation (RFR) using the calculation methodology described in *OET Bulletin 65, Edition 97-01*, prepared by the FCC Office of Engineering and Technology. A vertical plane relative field factor of 0.15, obtained from the attached manufacturer's theoretical vertical plane radiation pattern for the proposed KRKR Dielectric Communications, type DCR-H4E, transmitting

¹ The proposed KRKR transmitter site is located at geographic coordinates 41° 16' 06.0" North Latitude, 96° 11' 39.9" West Longitude referenced to the 1927 North American Datum (NAD27). Antenna Structure Registration Number: 1029423.



antenna, was used in the calculation of the KRKR power density. The KRKR circularly polarized ERP of 6.0 kW was used in the calculation of the KRKR power density, and to account for ground reflections, a coefficient of 1.6 was included in the calculations.

At the KRKR operating frequency of 94.9 MHz, the FCC Maximum Permissible Exposure (MPE) level for general population/uncontrolled exposures is 0.2 milliwatt per square centimeter (mW/cm^2), and the FCC MPE level for occupational/controlled exposures is $1.0 \text{ mW}/\text{cm}^2$. At a reference point two meters above ground level at the base of the tower supporting the proposed KRKR antenna, the calculated KRKR power density is $0.0012 \text{ mW}/\text{cm}^2$, which is 0.61 percent of the FCC MPE level for general population/uncontrolled exposures and 0.12 percent of the FCC MPE level for occupational/controlled exposures.

Pursuant to the provisions of *OET Bulletin 65, edition 97-01*, at multiple-user sites, only those licensees whose transmitters produce power density levels in excess of 5.0 percent of the applicable exposure limit are considered “significant contributors” and share responsibility for actions necessary to bring the local RFR environment into compliance with FCC



exposure limits. Since the proposed KRKR operation will contribute less than 5.0 percent of the more restrictive MPE at any location on the ground at the site, KRKR is not considered a “significant contributor” to the local RF exposure environment.

While not a “significant contributor” to the exposure levels at any location on the ground, the KRKR operation will be a “significant contributor” to exposure at locations on the supporting structure near the KRKR transmitting antenna. If work is done on the tower in an area where overexposure could occur, Chapin will take all actions necessary to prevent the overexposure of workers on the tower, including reducing KRKR transmitter power or ceasing KRKR operation completely.



The instant proposal is categorically excluded from environmental processing since none of the conditions of Sections 1.1306(b)(1), (2), or (3) of the FCC Rules would be involved for the following reasons:

1. The proposed KRKR facility utilizes an existing supporting structure which does not appear to be in or near any location referenced in Section 1.1306(b)(1) of the FCC Rules as being of environmental interest.

2. The provision of Section 1.1306(b)(2) of the FCC Rules relating to the use of high-intensity strobe lighting does not apply since the proposed tower height is less than 154 meters (500 feet) above ground level and high intensity strobe lighting is not used.

3. Finally, with regard to RFR exposure concerns, the instant proposal complies with the applicable FCC MPE limits.



CERTIFICATION

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed on April 10, 2007.

A handwritten signature in black ink that reads "Tiffany E. Shaw". The signature is written in a cursive, flowing style.

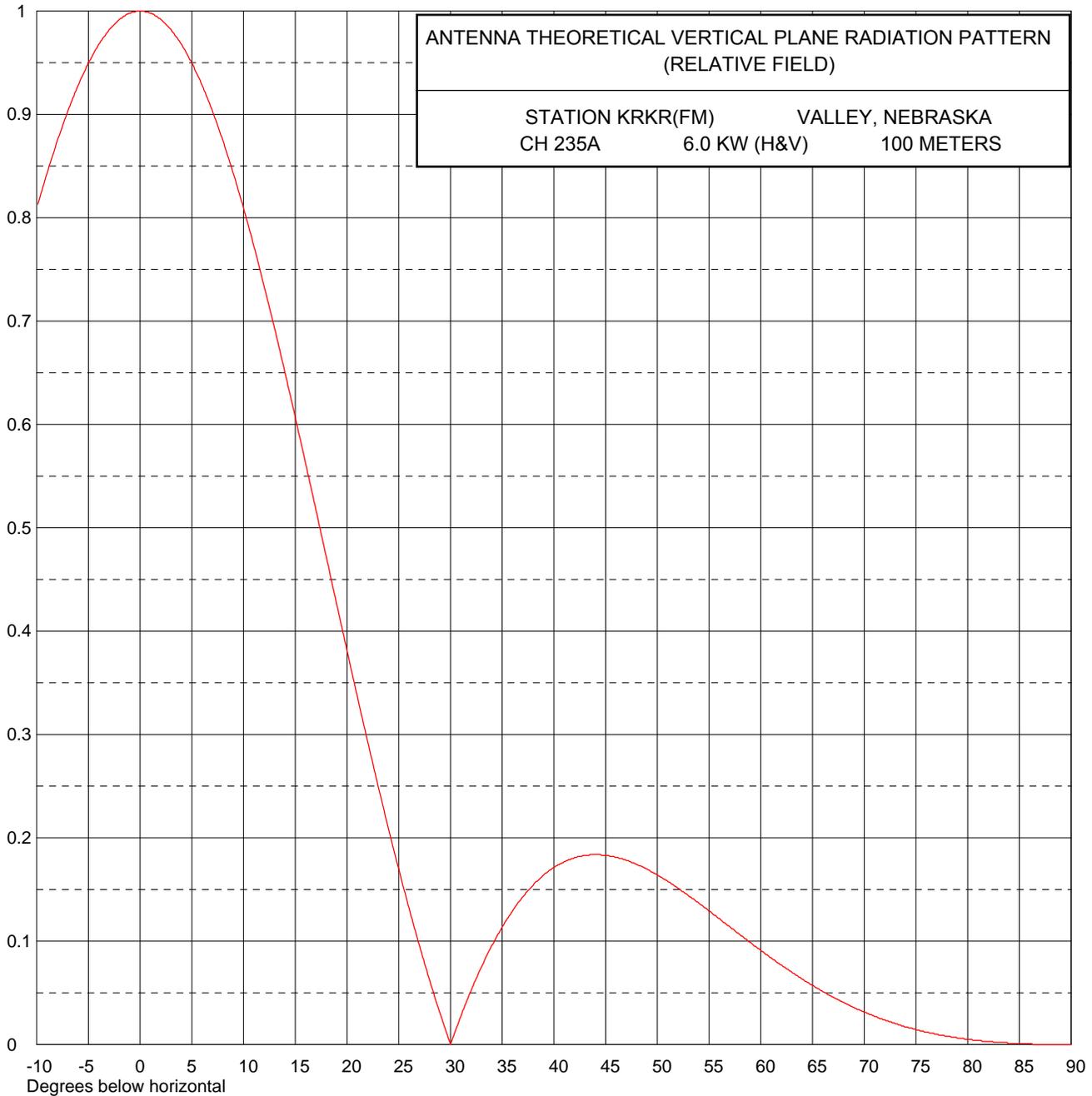
Tiffany E. Shaw



Date **26 Mar 2007**
Call Letters
Location
Customer
Antenna Type **DCR-H4E**
Channel **235**

ELEVATION PATTERN

RMS Gain at Main Lobe **1.3 (1.14 dB)** Beam Tilt **0.00 Degrees**
RMS Gain at Horizontal **1.3 (1.14 dB)** Frequency **94.90 MHz**
Calculated / Measured **Calculated** Drawing # **FE04H5000026000-90**



Remarks: