

ENGINEERING STATEMENT
OF
EDWARD P. DE LA HUNT
SUPPORT OF
APPLICATION FOR ONE-STEP
UPGRADE STATION
KVCK(FM) – WOLF POINT, MONTANA
CHANNEL 224C2 – 11.5 kW ERP - 152 M HAAT
FACILITY ID NO. 73384

GENERAL

I am a Consulting Engineer, my education and experiences are a matter of record with the Federal Communications Commission. This engineering statement, FCC Form 301, and associated exhibits have been prepared on behalf of Wolf Town Wireless, Inc., licensee of radio station KVCK(FM), Wolf Point, Montana.

SITE LOCATION

It is proposed to one-step upgrade KVCK(FM) at its presently licensed transmitter site. It is proposed to upgrade from channel 224A to 224C2. The site is uniquely described by the NAD-27 coordinates of North Latitude 48 degrees 11 minutes 09 seconds, West Longitude 105 degrees 40 minutes 08 seconds. This is a one site, one-step upgrade proposal. The allotment site and the proposed transmitter location are the same.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.313 of the Rules, utilizing the appropriate F(50,50) propagation curves from the Rules (Section 73.333, Figure 1), effective radiated power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the proposed site was determined using the National Geophysical Data Center Thirty Second Point Topography Database, as prescribed in Section 73.312(d) of the Rules. The antenna site elevation was determined by a qualified surveyor and is consistent with Antenna Structure Registration Number ASRN 1002939. The

distances to contours were calculated and verified utilizing the FCC's "Curves" computer program. The 3.16 mV/m (70 dBu) contour completely encompasses the principal community to be served (Wolf Point, Montana). **(See Exhibit 1).**

ALLOTMENT ALLOCATION STUDY

A FM channel allocation study was performed as a Class C2 facility to ensure that the proposed allotment site meets all of the minimum separation requirements to other authorized co-channel and adjacent channel stations and vacant allotments. The study revealed the proposed allotment site will meet all of the required separations as specified in Section 73.207 of the FCC Rules and Regulations. **(See Exhibit 2)**

APPLICATION ALLOCATION STUDY

A FM channel study was performed on the proposed application transmitter site a Class C2 facility to ensure that the application site meets all of the minimum separation requirements to other authorized co-channel and adjacent channel stations and vacant allotments. The study revealed the proposed application site meets all of the required separations as specified in Section 73.207 of the FCC Rules and Regulations. **(See Exhibit 2).**

CANADIAN CONCURRENCE

The KVCK(FM) transmitter site is located within 320 kilometers of the Canadian border. The present allotment is cleared as a Class B1 allotment with respect to Canada. The applicant requests the Audio Division to refer and negotiate for Canadian concurrence as a Class C2 facility as specified under the Canadian - U.S.A. FM Broadcasting Agreement of 1947. The proposed facility conforms to the Table of Minimum Distance Separations as set forth in the Agreement, therefore acceptance from the Canadian Administration should not be a problem. It is respectfully requested that the Commission, on behalf of Wolf Point Wireless, Inc., notify the Canadian Administration of the proposed facility and seek concurrence.

FAA NOTIFICATION

The proposed KVCK(FM) antenna will be side mounted on an existing tower support structure, with a height of 117 meters AGL and 862 meters AMSL. The FAA issued a “Determination of No Hazard”, Aeronautical Study No.79-RM-424-OE on October 24, 1979. Antenna Structure Registration was obtained September 26, 1996. ASRN Number 1002939 **(See Exhibit 3, Vertical Plan Antenna Sketch).**

TECHNICAL FACILITIES

The applicant proposes at this time to utilize an SWR, Model FM3-3, three-bay, omni-directional, circularly-polarized antenna. The FM antenna system will be side-mounted on a existing steel-guyed tower such that the radiation centerline is 115 meters above ground level (860 meters above mean sea level). The overall height of the tower will be 117 meters above ground (862 meters above mean sea level).

A type-approved transmitter of adequate power for the required transmitter power output (TPO) will be installed at the time of construction. The appropriate TPO will be determined at license application filing to achieve an effective radiated power of 11.5 kilowatts taking into consideration the losses in transmission line, transmission system losses and the power gain of the antenna system.

BLANKETING AND INTERMODULATION INTERFERENCE

There are no known commercial or government receiving stations or cable head-end facilities located within the blanketing contour. The KVCK(FM) proposed antenna system is not located within 60 meters of any other antenna. In the event that blanketing or intermodulation interference, including RITOIE, occurs with any facilities or to radio receivers in use prior to grant of their application, the applicant will accept the responsibility to alleviate any interference resulting from the proposal.

In accordance with the Commission's January 2, 1991, decision (FCC 91-3, released January 14, 1991) regarding the application of WKLX, Inc., the applicant will exclude both mobile and battery-powered receivers from Receiver Induced Third Order Intermodulation and Blanketing Interference Resolution Requirements. In the event any type of intermodulation occurs with any other facility which has not been identified, the applicant will install and maintain any traps or filters necessary to reduce or eliminate any interference. The applicant will respond to any complaints for a period of one year, in compliance with Section 73.318(b) of the Commission Rules.

ENVIRONMENTAL IMPACT

The proposal described herein meets the criteria specified in Section 1.1306 of the Commission Rules as an action, which is categorically excluded from environmental processing. The proposal does not involve a site location specified under Section 1.1307(a)(1-7) of the Rules, nor high intensity lighting as specified under Section 1.1307(a)(8). This is an existing tower.

RADIOFREQUENCY RADIATION IMPACT

The proposed facility will not result in human exposure to radiofrequency (RF) radiation in excess of safety standards specified in Section 1.1307(b). Effective October 15, 1997, the FCC adopted revised guidelines and procedures for evaluating the environmental effects of RF emissions. These revised guidelines incorporate two tiers of exposure limits based on whether exposure occurs in a "controlled" (occupational) situation or an "uncontrolled" (general population) situation. Based on the methods published in OET Bulletin No. 65 (entitled "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields"), the predicted power density value produced by the proposed facility will be well below the established ANSI guideline limits.

Verification of compliance with FCC-specified guidelines for human exposure to RF radiation was determined utilizing the equations and graphs set forth in OET Bulletin No. 65. The KVCK(FM) proposed facility will not be co-located on the same support structure with any other FM station(s). Since this will be a single-user site, only the contribution of the proposed facilities has been calculated. The bulletin prescribes that the fraction of the recommended limit incurred within each frequency interval should be determined and that the sum of all fractional contributions should not exceed 100%.

The proposed KVCK(FM), Wolf Point, Montana facility will operate with a radiation centerline at 115.0 meters above ground level (AGL) and an ERP of 11.5 kW on Channel 224 operating with dual polarization. The KVCK(FM), Wolf Point, Montana Dakota proposes to utilize an SWRI, Model FM3-3, 3 bay antenna. Utilizing FMMODEL and the methods prescribed by the EPA in the Gailey and Tell report, this antenna is classified as a “di-pole” or “Type 1” antenna. The highest value of power density occurs at 23.6 meters from the base of the tower which is 0.04009 mW/cm^2 or 20% of the 0.2 mW/cm^2 MPE limit for uncontrolled/general exposures. It is 4% of the MPE for occupational/controlled areas.

The worst-case contribution of the proposed will be 20 for MPE uncontrolled/general exposure limits. It is 4% of the MPE for occupational/controlled areas. Since the proposed combined power density is less than 100 percent of the ANSI guideline, the proposed facility complies with FCC requirements regarding radiofrequency radiation. In addition, the base of the tower will be fenced and warning signs will be posted at appropriate intervals to preclude casual access.

It is submitted that the proposal will not constitute a potential hazard to the quality of the human environment. Accordingly, the KVCK(FM) proposal, as described herein, should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Rules.

OCCUPATIONAL SAFETY

The applicant will ensure protection to station personnel working in the vicinity of their antenna. Access to the antenna supporting tower base will be restricted to authorized personnel only. The applicant will reduce power or cease operation, when appropriate and deemed necessary, during times of service or maintenance of the transmitting system or when work is being performed on the tower to avoid potentially harmful exposure to station personnel or workers. The applicant will initiate joint procedures with common users to be followed during times of service or maintenance of the transmission systems when necessary to avoid potentially harmful exposure to personnel.

SUMMARY

It is submitted that the one-step upgrade proposal of radio station KVCK(FM) as described herein complies with the Rules and Regulations of the Federal Communications Commission.

This statement and attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct.

DATED: November 2005

Edward P. De La Hunt