



**STATEMENT OF JOHN E. HIDLE, P.E.  
IN SUPPORT OF AN APPLICATION FOR  
A MINOR MODIFICATION OF A  
POST REPACK CONSTRUCTION PERMIT  
FILE # 0000034520  
KDBZ-CD - BOZEMAN, MONTANA  
DTV - CH. 29 - 15 kW - 214 m HAAT**

Prepared for: Sinclair Media Licensee, LLC

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, No. 7418, and in New York State, No. 63418.

**GENERAL**

This office has been authorized by Sinclair Media Licensee, LLC, licensee of KDBZ-CD, channel 42, facility ID number 18083, licensed to Bozeman, Montana, to prepare this statement, FCC Form 2100, Schedule A, its technical sections, and the associated exhibits in support of an application for a minor modification of its post-reassignment construction permit, File # 0000034520, that authorizes KDBZ-CD to use channel 29 for its post-reassignment broadcasting. The instant application proposes only to substitute a different model of directional antenna at the same height above ground as its currently authorized non-directional antenna. No other changes are proposed

## **DIRECTIONAL ANTENNA**

The applicant proposes to substitute its existing licensed antenna, a KATHREIN model KAT 2XK723417 in place of its currently authorized Dielectric model TLP-8TLP directional transmitting antenna. The substitute antenna's center of radiation is located at the same height above ground of 53.3 meters, and the same height above average terrain of 214 meters, as is currently authorized.

## **PREDICTED COVERAGE CONTOURS**

The predicted coverage contours were calculated in accordance with the method described in Section 73.625(b) of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), proposed 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 site, was determined using the NED Three Second US Terrain Database as permitted in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. Exhibit 1 shows the predicted Protected Class (51 dBu) contour which completely encompasses the community of license, Bozeman, Montana.

## **OTHER CONSIDERATIONS**

### **BLANKETING AND INTERMODULATION INTERFERENCE**

Other broadcast and non-broadcast facilities are either co-located with, or located within 10 km of the proposed KDBZ-CD site. The applicant does recognize its responsibility to remedy complaints of interference that might result from this proposal in accordance with applicable Rules.

## **RADIO FREQUENCY SAFETY**

The licensee of KDBZ-CD is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KDBZ-CD antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

## **RADIO FREQUENCY IMPACT & STATEMENT OF COMPLIANCE**

As discussed below, KDBZ-CD's predicted power density contribution at the multiple-use site is not considered significant and does not require consideration. Considering a conservative predicted vertical plane relative field factor of 0.300 the KDBZ-CD facility is predicted to produce a worst-case power density at two meters above ground level of  $17.14 \mu\text{W}/\text{cm}^2$ , which is 4.57% of the FCC guideline value of  $375.33 \mu\text{W}/\text{cm}^2$  for an "uncontrolled" environment, and 0.91% of the FCC's guideline value for "controlled" environments. Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, because the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, the proposal's power density contribution is considered insignificant.

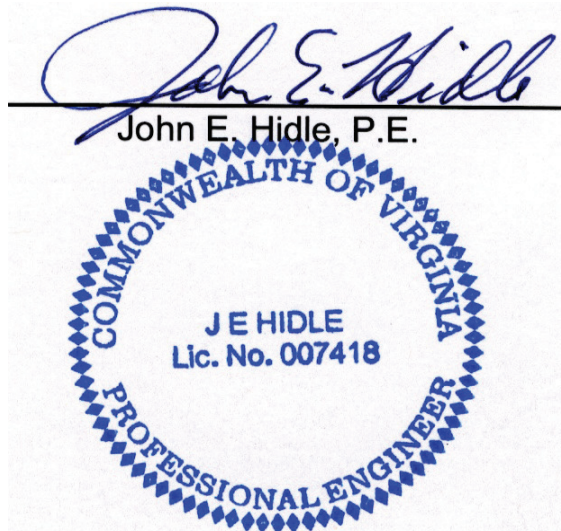
Further, the applicant will continue to cooperate and coordinate with other site users and reduce power and/or cease operation during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel. In light of the above, the proposed facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules,

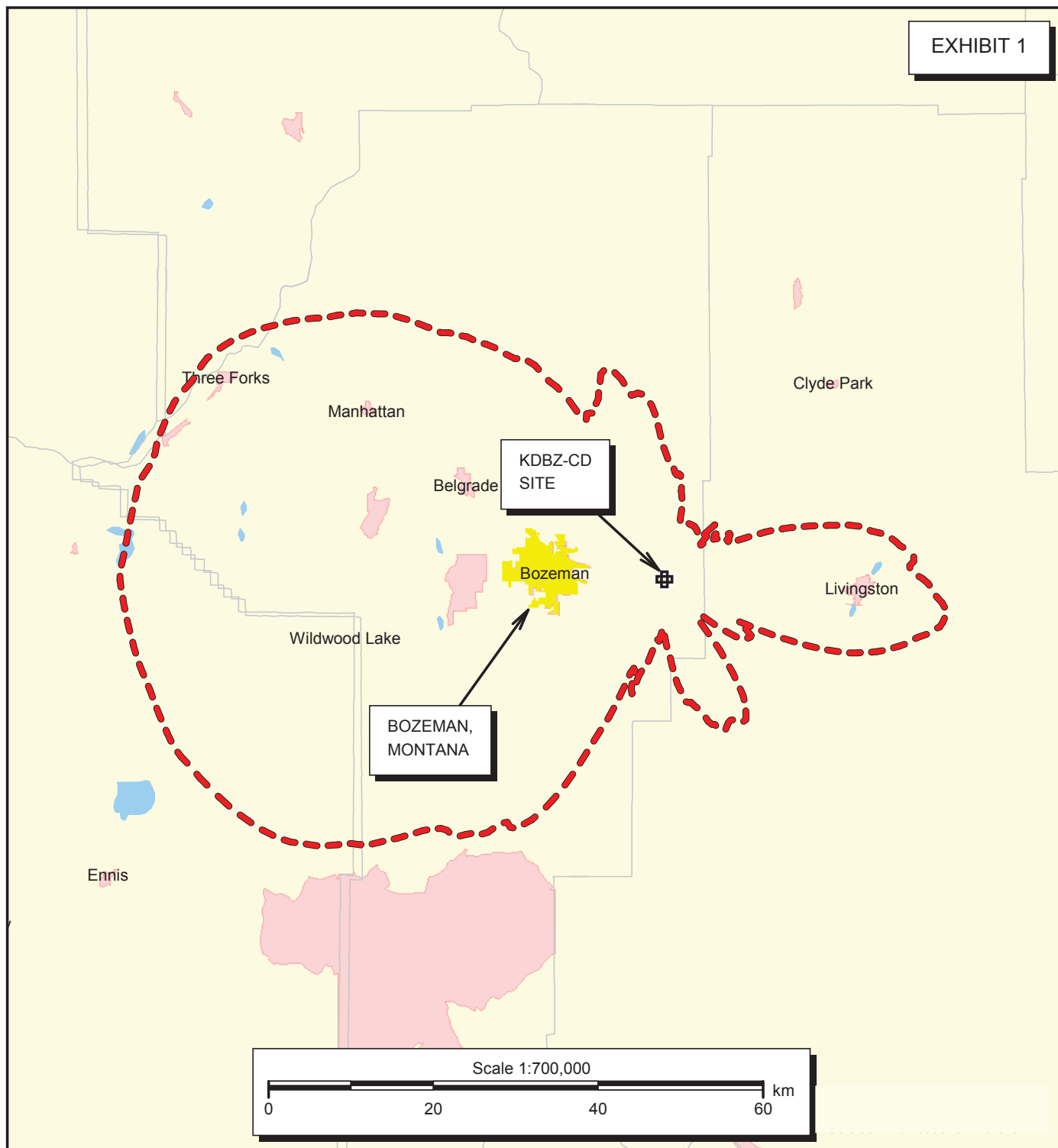
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**SUMMARY**

It is submitted that the instant application for a minor modification of KDBZ-CD's post-reassignment channel 29 construction permit, file # 0000034520, to substitute a different directional antenna, as described herein, does comply with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement, FCC Form 2100, its technical sections, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: May 29, 2019





## PREDICTED COVERAGE CONTOURS

KDBZ-CD - BOZEMAN, MONTANA  
 DTV Channel 29 - 15 kW ERP - 214 M HAAT  
 MAY, 2019



## **ENVIRONMENTAL AND RADIO FREQUENCY SAFETY**

The licensee of KDBZ-CD is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KDBZ-CD antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

As discussed below, KDBZ-CD's predicted power density contribution at the multiple-use site is not considered significant and does not require consideration. Considering a conservative predicted vertical plane relative field factor of 0.300 the KDBZ-CD facility is predicted to produce a worst-case power density at two meters above ground level of  $17.14 \mu\text{W}/\text{cm}^2$ , which is 4.57% of the FCC guideline value of  $375.33 \mu\text{W}/\text{cm}^2$  for an "uncontrolled" environment, and 0.91% of the FCC's guideline value for "controlled" environments. Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, because the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, the proposal's power density contribution is considered insignificant.

Further, the applicant will continue to cooperate and coordinate with other site users and reduce power and/or cease operation during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel. In light of the above, the proposed facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.