

**ENGINEERING REPORT  
MINOR CHANGE  
CONSTRUCTION PERMIT  
APPLICATION - AMENDMENT**

for

**KMLD(FM) – Casper, WY**  
CH233C (94.5 MHz)  
(Facility ID No. 58449)

April 2022

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**MUNN-REESE**

Broadcast Engineering Consultants  
Coldwater, MI 49036

## **Discussion of Report**

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This firm was retained to prepare a required engineering report in support of this AMENDMENT to Minor Change Construction Permit Application for KMLD(FM) – Casper, WY (Facility ID No. 11927). Presently KMLD(FM) operates under License BLH-19790130AD with 65 kW ERP (H&V) at 2548 meters AMSL on CH233C. KMLD(FM) operating parameters of 65 kW ERP (H&V) at 2533 meters AMSL on CH233C are requested. KMLD(FM) will continue to serve the community of Casper, WY.

The proposed site for the Class C operation meets domestic and international spacing requirements of 47 C.F.R. §73.207 toward other stations in the allocation. A tabulation of the existing and required spacing toward each of the other relevant stations is found in ***Exhibit 2.0***.

The proposed service contours have been calculated in accordance with the Rules, and the data obtained has been tabulated and plotted in this report. The plotted contours are found in ***Exhibit 1.0*** of this report. This exhibit shows the 70 dBu contour which serves the community of license, and the overall service provided by the 60 dBu contour of the facility. The plotted contours shown in ***Exhibit 1.1*** are based on the use of a full 360 terrain radials. The applicant would like to note the use of the NED 03 SEC terrain database for all allocation, contour and HAAT calculations contained here-in.

# Exhibit 1.0 - KMLD(FM) Present and Proposed

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## KMLD.A

0000156904  
Latitude: 42-44-02.93 N  
Longitude: 106-19-59.91 W  
ERP: 65.00 kW  
Channel: 233  
Frequency: 94.5 MHz  
AMSL Height: 2548.0 m  
Elevation: 2478.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

## KMLD.A (as Amended)

0000156904  
Latitude: 42-44-37.03 N  
Longitude: 106-18-31.01 W  
ERP: 65.00 kW  
Channel: 233  
Frequency: 94.5 MHz  
AMSL Height: 2533.0 m  
Elevation: 2440.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

- KMLD.A (233)
- KMLD.A (as Amended) (233)

FCC F(50-50) 60.00 dBu (FCC HAAT)

FCC F(50-50) 60.00 dBu (FCC HAAT)

FCC F(50-50) 70.00 dBu (FCC HAAT)

Casper

KMLD.A (as Amended)

KMLD.A

Scale 1:1,500,000

0 20 40 60 km

Exhibit 2.0 - Proposed Allocation  
Mt. Rushmore Broadcasting, In

REFERENCE		DISPLAY DATES
42 44 36.90 N.	CLASS = C	DATA 04-23-22
106 18 33.10 W.	Current Spacings to 3rd Adj.	SEARCH 04-26-22
----- Channel 233 - 94.5 MHz -----		

Call	Channel	Location		Azi	Dist	FCC	Margin
KMLD	APP 233C	Casper	WY	242.4	2.27	289.5	-287.2
KMLD	LIC 233C	Casper	WY	242.4	2.27	289.5	-287.2
DKCYO	VAC 235C3	Bairoil	WY	233.9	105.36	95.5	9.9
AL1497	RSV-A 233C2	Cody	WY	316.0	286.71	248.5	38.2
KTAK	LIC 230C1	Riverton	WY	269.6	150.49	104.5	46.0
KMAX-FM	LIC 232C3	Wellington	CO	154.0	223.71	175.5	48.2
KRKS-FM	LIC-D 234C	Lafayette	CO	164.7	307.26	240.5	66.8
KCGY	LIC 236C	Laramie	WY	155.8	174.22	104.5	69.7
KCNB	LIC 234C1	Chadron	NE	90.8	296.12	208.5	87.6

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RSV-R = reserved - needs protection, RSV-A = allocation  
All separation margins include rounding