United States of America

FEDERAL COMMUNICATIONS COMMISSION

AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

KMB BROADCASTING, INC.
604 LUDINGTON STREET
ESCANABA MI 49829

Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Grant Date: FEB 2 6 2019

Facility Id: 35115

Call Sign: WDBC

This license expires 3:00 a.m. local time, October 01, 2020.

License File Number: BL-20181217ABC

License to cover BP-20160909ABN to correct site coordinates and reduce daytime power from 10 to 6 kW.

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:
Local Standard Time (Non-Advanced)

Jan.	8:30 AM	5:30 PM	Jul.	5:15 AM	8:30 PM
Feb.	7:45 AM	6:15 PM	Aug.	5:45 AM	8:00 PM
Mar.	7:00 AM	7:00 PM	Sep.	6:30 AM	7:00 PM
Apr.	6:00 AM	7:30 PM	Oct.	7:00 AM	6:00 PM
May	5:15 AM	8:15 PM	Nov.	7:45 AM	5:15 PM
Jun.	5:00 AM	8:45 PM	Dec.	8:15 AM	5:00 PM

Name of Licensee: KMB BROADCASTING, INC.

Station Location: ESCANABA, MI

Frequency (kHz): 680

Station Class: B

Antenna Coordinates:

		Day				
Latitude:	N	45 Deg	45 Min	47 Sec		
Longitude:	W	87 Deg	05 Min	41 Sec		
		Night				
Latitude:	N	45 Deg	45 Min	47 Sec		
Longitude:	W	87 Deg	05 Min	41 Sec		

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 6.0 Night: 1.0

Antenna Input Power (kW): Day: 6.3 Night: 1.08

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 10.85 Night: 4.6

Resistance (ohms): Day: 53.6 Night: 51

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1234380	
2	1234374	

Night:

Tower No.	ASRN	Overall Height (m)
1	1234375	
2	1234374	
3	1234380	
4	1234379	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 729.45 Night: 305.78

Standard RMS (mV/m/km): Day: 766.36

Augmented RMS (mV/m/km): Night: 325.43

Q Factor: Day: Night:

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	70.2
2	0.5000	70.000	90.0000	190.000	0	70.2

* Tower Reference Switch
0 = Spacing and orientation from reference tower
1 = Spacing and orientation from previous tower

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	2.3400	55.000	0.0000	0.000	0	70.2
2	1.5000	55.000	190.0000	75.000	0	70.2
3	1.0000	-55.000	242.2000	55.300	0	70.2
4	1.5600	-55.000	90.0000	10.000	0	70.2

* Tower Reference Switch
0 = Spacing and orientation from reference tower
1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	20.0	40.0	492.46
2	92.8	15.4	124.40
3	100.5	15.4	122.79
4	145.0	10.0	155.95
5	210.0	10.0	85.30
6	220.0	10.0	99.78
7	225.0	10.0	93.34
8	232.5	15.0	93.34
9	260.0	20.0	93.34
10	260.0	10.0	120.70
11	270.0	20.0	112.65
12	270.0	10.0	140.17

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
13	280.0	20.0	112.65
14	280.0	10.0	158.68

Day Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	0	0.5
2	70	1

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	110	0.96
2	110	1.5
3	0	1
4	-10	0.64

Antenna Monitor: POTOMAC INSTRUMENTS AM-19(204)

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Day Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
20	3.81	201.4
190	1.95	140.6
210	2.25	125.5

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
54.5	2.93	59
100.5	1.96	67.5
145	4.38	40.8
225	2.74	13.5
260	7.05	8
270	6.97	9.6
280	8.53	9.2

Special operating conditions or restrictions:

1 Licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

2 Ground system consists of 120 equally spaced, buried copper radials 110.4 meters in length about the base of each tower, except where intersecting radials shortened and bonded to transverse copper straps midway between adjacent elements.

3 Daytime array consists of towers #3(NE) and #2(SE) in that order, and nighttime array consists of towers #1(SW), #2(SE), #3(NE), and #4NW).

Special operating conditions or restrictions:

4 MONITOR POINT DESCRIPTIONS

20° - From the intersection of County 426 Road and Dam Road, proceed southeast on Dam Road for 0.56 km to point located in driveway, opposite white post on north side of road just before entry onto Highways 2, 41 and M35, 3.81 km from site, max 201.4 mV/m daytime.

190° - From intersection of Sheraton Road and Ludington Street, proceed west on Ludington Street for 2.25 km to point located on south side of street west of City Limit sign, 1.95 km from site, max 140.6 mV/m daytime.

210° - From intersection of Sheraton Road and Ludington Street, proceed west on Ludington Street for 2.98 km to point located on north side of road at driveway to Pioneer Truck Company, 2.25 km from site, max 125.5 mV/m daytime.

54.5° - From intersection of Main Street and Sheraton Road, proceed east (around jog) on Main Street to end where intersects with dirt road following the Escanaba River, then southeast on dirt road bearing to left for 0.16 km to point in middle of dirt road, opposite marked tree on east side of road, 2.93 km from site, max 59.0 nighttime.

100.5° - From intersection of Main Street and Sheraton Road, proceed south on Sheraton Road for 1.85 km to point located on sidewalk at entry walk to house #1117, 1.96 km from site, max 67.5 mV/m nighttime.

145° - From intersection of 12th Avenue S and Lake Shore Drive, proceed south on Lake Shore Drive one-half block to point on concrete stepping-stone walkway into park, 30 paces west of marked tree, 4.38 km from site, max 40.8 mV/m nighttime.

225° - From intersection of Sheraton Road and Ludington Street, proceed west on Ludington Street for 3.86 km to point located on south side of road, 20 paces east of driveway to yellow house # 4909, 2.74 km from site, max 13.5 mV/m nighttime.

260° - From intersection on Danforth Road and I Road, proceed south on I Road to intersection with J Road, then east on J Road for 3.62 km to driveway on west side of road, then proceed into driveway for short distance to point located at bend in driveway toward garage of blue-gray house #5703 on west side of road, 7.05 km from site, max 8.0 mV/m nighttime.

270° - From intersection of I Road and J Road, proceed east on J Road for 2.33 km to
driveway on right, then west into driveway and proceed 0.08 km to point located in middle of driveway between trees on north and south sides, 6.97 km from site, max 9.6 mV/m nighttime.

280° - From intersection of Danforth Road and I Road, proceed south on I Road for 2.33 km to point located on east side of road, opposite tar paper shack #6384 to the east, 8.53 km from site, max 9.2 mV/m nighttime.

*** END OF AUTHORIZATION ***