

## United States of America FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

SAGA BROADCASTING, LLC 73 KERCHEVAL AVENUE GROSSE POINTE FARMS MI 48236 Son Nguyen Supervisory Engineer Audio Division Media Bureau

This license expires 3:00 a.m. local time, February 01, 2006.

Grant Date:

Facility Id: 58887

Call Sign: KPUG

License File Number: BZ-19931115AE

This is to reissue authorization to reflect a change in antenna monitor and 92 degree monitor point as notified by letter of June 7, 1999.

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 Op	peration:			Jul.	4:15	AM	8:15	PM
Average hours of sun			rise and sunset:	Aug.	5:00	AM	7:30	PM	
Local	Stand	lard Time	(Non-Advanced)	Sep.	5:45	AM	6:30	PM	
Jan.	8:00	AM	4:45	PM	Oct.	6:30	AM	5:15	PM
Feb.	7:15	AM	5:30	PM	Nov.	7:15	AM	4:30	PM
Mar.	6:30	AM	6:15	PM	Dec.	8:00	AM	4:15	PM
Apr.	5:15	AM	7:00	PM					
Мау	4:30	AM	7:45	PM					
Jun.	4:00	AM	8:15	PM					

Name of Licensee: SAGA BROADCASTING, LLC Station Location: BELLINGHAM, WA

Frequency (kHz): 1170

Station Class: B

Antenna Coordinates:

Night

Latitude: N 48 Deg 46 Min 34 Sec Longitude: W 122 Deg 26 Min 21 Sec

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

Nominal Power (kW): Night: 5.0

Antenna Input Power (kW): Night: 5.4

Antenna Mode: Night: DA

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

Current (amperes): Night: 10.38

Resistance (ohms): Night: 50.2

Antenna Registration Number(s):

Night:

Tower No. ASRN Overall Height (m) 1 1032002 2 1032003 3 1032004

Callsign: KPUG					icense No.:	BZ-1993113	15AE
DESCRIPTI	ON OF DIRE	ECTIONAL AN	NTENNA SYS	STEM			
Theoretical RMS (mV/m/km): Night: 714.98							
Standard RMS (mV/m/km): Night: 751.096							
Augmented RMS (mV/m/km):							
Q Factor: Night: 22.36							
Theoretical Parameters:							
Night Directional Antenna:							
	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)	
1	1.0000	0.000	67.6600	110.000	0	92.1	
2	0.5100	-99.000	0.0000	0.000	0	92.1	
3	0.4800	101.000	67.6600	110.000	1	92.1	
*	Deference	Curitah					

\* Tower Reference Switch

 $\ensuremath{\texttt{0}}$  = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Night Directional Operation:

Twr.	Phase	Antenna Monitor				
No.	(Deg.)	Sample Current Ratio				
1	0	1				
2	-88.8	0.474				
3	100	0.499				

Antenna Monitor: Gorman Redlich CMR

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Night Operation:

Radial I (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
92	1.87	12.61
110	1.42	16.4
145	1.66	31.3

\*\*\* END OF AUTHORIZATION \*\*\*