



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

UNIVERSITY OF NORTHWESTERN-ST. PAUL
3003 SNELLING AVE N
SAINT PAUL MN 55113

Penelope A. Dade
Supervisory Analyst
Audio Division
Media Bureau

Facility Id: 49784

Call Sign: KNWS

License File Number: BL-20130115ADQ

Grant Date: February 20, 2013

This license expires 3:00 a.m.
local time, February 01, 2021.

This license covers permit no.: BP-20120622AAH

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: Daytime

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

Jan.	7:45 AM	5:00 PM	Jul.	4:45 AM	7:45 PM
Feb.	7:00 AM	5:45 PM	Aug.	5:15 AM	7:15 PM
Mar.	6:30 AM	6:15 PM	Sep.	5:45 AM	6:15 PM
Apr.	5:30 AM	6:45 PM	Oct.	6:15 AM	5:30 PM
May	4:45 AM	7:30 PM	Nov.	7:00 AM	4:45 PM
Jun.	4:30 AM	7:45 PM	Dec.	7:30 AM	4:30 PM

Callsign: KNWS

License No.: BL-20130115ADQ

Name of Licensee: UNIVERSITY OF NORTHWESTERN-ST. PAUL

Station Location: WATERLOO, IA

Frequency (kHz): 1090

Station Class: D

Antenna Coordinates:

Day

Latitude: N 42 Deg 26 Min 38 Sec

Longitude: W 92 Deg 17 Min 58 Sec

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

Nominal Power (kW): Day: 1.0

Antenna Input Power (kW): Day: 1.0

Antenna Mode: Day: ND

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

Current (amperes): Day: 5.28

Resistance (ohms): Day: 35.9

Non-Directional Antenna: Day

Radiator Height: 59.1 meters; 77.3 deg

Theoretical Efficiency: 288.045 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1024385	

Special operating conditions or restrictions:

- 1 The permittee/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.

Special operating conditions or restrictions:

- 2 Ground system consists of 120 equally spaced, buried, copper radials about the base of tower, with an average of 59.2 meters in length, plus 120 interspersed radials 15.2 meters in length, plus a copper ground screen 7.3 meters square, about the base of tower.

*** END OF AUTHORIZATION ***