



United States of America
FEDERAL COMMUNICATIONS COMMISSION
FM BROADCAST STATION CONSTRUCTION PERMIT

Authorizing Official:

Official Mailing Address:

WASHINGTON STATE UNIVERSITY
EDWARD R MURROW COLLEGE OF COMMUNICATION
P.O. BOX 642530
PULLMAN WA 99164

Arthur E. Doak
Senior Engineer
Audio Division
Media Bureau

Facility ID: 71042

Grant Date: September 19, 2013

Call Sign: KNWV

The authority granted herein has no effect on the expiration date of the underlying construction permit.

Permit File Number: BMPED-20130906ABI

This permit modifies Permit No.: BPED-20100910ADU

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Commission rules which became effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration. See Section 73.3598.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Name of Permittee: WASHINGTON STATE UNIVERSITY

Station Location: WA-CLARKSTON

Frequency (MHz): 90.5

Channel: 213

Class: A

Hours of Operation: Unlimited

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

Transmitter output power: As required to achieve authorized ERP.

Antenna type: Directional

Antenna Coordinates: North Latitude: 46 deg 27 min 26 sec
West Longitude: 117 deg 06 min 00 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	.35	.35
Height of radiation center above ground (Meters):	40	40
Height of radiation center above mean sea level (Meters):	930	930
Height of radiation center above average terrain (Meters):	340	340

Antenna structure registration number: Not Required

Overall height of antenna structure above ground: 55 Meters

Obstruction marking and lighting specifications for antenna structure:

It is to be expressly understood that the issuance of these specifications is in no way to be considered as precluding additional or modified marking or lighting as may hereafter be required under the provisions of Section 303(q) of the Communications Act of 1934, as amended.

None Required

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 the FCC guidelines.

Special operating conditions or restrictions:

- 2 Waiver of 47 C.F.R. Section 73.1125 was previously granted to allow operation of this facility as a satellite operation of the following station:

KRFA-FM, Moscow, Idaho, Facility ID No. 71016, Washington State University
- 3 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee/licensee must submit the results of a complete proof-of-performance to establish the horizontal plane radiation patterns for both the horizontally and vertically polarized radiation components. This proof-of-performance may be accomplished using the complete full size antenna, or individual bays therefrom, mounted on a supporting structure of identical dimensions and configuration as the proposed structure, including all braces, ladders, conduits, coaxial lines, and other appurtenances; or using a carefully manufactured scale model of the entire antenna, or individual bays therefrom, mounted on an equally scaled model of the proposed supporting structure, including all appurtenances. Engineering exhibits must include a description of the antenna testing facilities and equipment employed, including appropriate photographs or sketches and a description of the testing procedures, including scale factor, measurements frequency, and equipment calibration.
- 4 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee must submit a certification executed by a licensed surveyor showing that the FM directional antenna system has been oriented at the azimuth(s) specified in the directional antenna proof of performance. This certification must include a description of the method used by the surveyor to determine the azimuth(s) of the installed directional antenna system and the accuracy of that determination.
- 5 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee/licensee must submit an affidavit that the installation of the directional antenna system was overseen by a qualified engineer. This affidavit must include a certification by the engineer that the antenna was installed pursuant to the manufacturer's instructions and list the qualifications of the certifying engineer.
- 6 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee/licensee must submit an exhibit demonstrating that the measured directional antenna pattern complies with the appropriate community coverage requirements of 47 C.F.R. Sections 73.315 or 73.515 (See 47 C.F.R. § 73.316(c)(2)(ix)(B)).
- 7 The RMS of the composite measured relative field horizontal plane directional antenna pattern must encompass at least 85% of the RMS of the composite relative field horizontal plane directional antenna pattern authorized by this construction permit.

Special operating conditions or restrictions:

- 8 The relative field strength of neither the measured horizontally nor vertically polarized radiation component shall exceed at any azimuth the value indicated on the composite radiation pattern authorized by this construction permit.

A relative field strength of 1.0 on the composite radiation pattern herein authorized corresponds to the following effective radiated power:

0.35 kilowatt

Principal minima and their associated field strength limits:

330 to 20 degrees True (clockwise): 0.011 kilowatt (11 watts)

*** END OF AUTHORIZATION ***