

**Exhibit to WKDD Auxiliary Antenna Application  
Minor Change  
Munroe Falls, OH  
Facility ID: 43863**

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This exhibit presents the technical details of a minor change application seeking an auxiliary antenna for WKDD.

**Proposed Antenna Location**

Proposed is an auxiliary antenna facility co-located upon the same tower as the main facility of WKDD as licensed by BLH-20100831AAP.

This proposal is to utilize an existing antenna located 106 above ground on the tower identified by antenna structure registration number 1014567, which is located very near the WCUE(AM) directional array.

**73.1692 Compliance**

We request this proposal be permitted without a condition requiring pre-construction measurements of the WCUE antenna pattern.

The tower utilizes a detuning skirt which was adjusted to a "detuned state" by use of a sampling loop installed on the tower post construction<sup>1</sup>. The antenna and transmission line to be utilized in this proposal has been on the tower since just after it was constructed, and the tower was detuned with the antenna and line in place, as can be evidenced by *Figure 1*.

Because this proposal utilizes an existing antenna and transmission line no construction or modification of the tower will be necessary. We therefore request that it be permitted without a condition requiring pre-construction measurements of the WCUE antenna pattern.

**Spacing Compliance**

Attached as Figure 2 is a map demonstrating this proposal will not extend the 1 mv/m contour of the station.

**Radio Frequency Radiation Study and Statement**

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level

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<sup>1</sup> See Attachment 10, "Pre and Post Measurement Report on WCUE" of BLH - 20100831AAP.

in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The antenna system is an ERI "Roto-tiller" 3 bay full wave spaced array which has been evaluated using the program "FM Model" as EPA type 3, "Rototiller " antenna, mounted with its center of radiation 106 meters above ground level, and operated with an effective radiated power of 22.75 kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 52 meters from the base of the tower, this proposal will contribute worst case, 14.7 microwatts per square centimeter, or 1.47 percent of the allowable ANSI limit for controlled exposure, and 7.35 percent of the allowable limit for uncontrolled exposure.

It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower.

Figure 1 - Antenna Install Date Documentation

**NORTHWEST  
TOWER & ANTENNA**

**P.O. Box 2034  
Lima, Ohio 45806  
(419) 648-6211 • Fax (419) 648-4435**

Sept. 18, 2012

Northwest Tower & Antenna, Inc. installed an ERI MPX-3E FM broadcast antenna and associated transmission line on tower ASR 1014567 on June 18, 2010. All work associated with this installation was documented in Northwest Tower's worklog for the date shown.

Signed: Douglas P. Mooney  
Douglas P. Mooney - Pres.

Dated: 9/19/2012

Notarized: Gavle S. Millinger

**Gavle S. Millinger**  
Notary Public, State of Ohio  
Commission Expires Dec. 10, 2012

**TOWER ERECTION - MICROWAVE - BROADCASTING - CELLULAR - MAINTENANCE**

Figure 2 - 60 dBu Contour Map

