

**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING LLC**  
**WTOD AM RADIO STATION**  
**has: 1560 kHz - 5.0 kW - DAD**  
**req: 1560 kHz - 0.002/4.3 kW - DA2**  
**TOLEDO, OHIO**  
**February 2008**

**TECHNICAL STATEMENT**

This Technical Statement supports the application by Cumulus Licensing LLC ("Cumulus"), licensee of AM Station WTOD, 1560 kHz, Toledo, Ohio to make changes in the WTOD licensed facilities. Specifically, Cumulus requests a relocation of WTOD to another site with a change to the daytime directional antenna system and a slight reduction in power during daytime hours. The proposed facility will continue to provide the necessary daytime coverage to the city of Toledo, as required by the Commission's rules. It is further proposed to operate WTOD during nighttime hours using the daytime directional antenna at a reduced power of 0.002 kilowatt (2 Watts).

It is proposed to relocate the WTOD antenna system to a site that is currently open farm area. A review of the location and proposed tower construction using the FCC program TOWAIR indicates there is no requirement to notify the Federal Aviation Administration or to register the towers with the FCC. The towers ( $.26 \lambda$  radiator) will be fenced at no less than 2.0 meters (6.6 feet) from the structure, complying with the FCC's requirements to protect the general public from radio frequency radiation exposure in compliance with Table 2 of the AM RF Worksheet for FCC Form 301. It is proposed to share Tower 2 with station WLQR, 1470

kHz (DA), as proposed in a separate application for WLQR.<sup>1</sup> At the WLQR frequency this tower is a  $.24 \lambda$  radiator, and at the WTOD frequency this tower is a  $.26 \lambda$  radiator. Combining the proposed power of WTOD and WLQR, the RF power on this structure is less than 10 kilowatts. Since this tower will be fenced at no less than 2.0 meters (6.6 feet) from the structure, it complies with the FCC's requirements to protect the general public from radio frequency radiation exposure in compliance with Table 2 of the AM RF Worksheet for FCC Form 301.<sup>2</sup>

The WTOD ground system will be composed of 120 buried copper ground wires equally spaced around each tower, buried 6" - 8" below grade and extending outward from each tower at least 157 feet, except where terminated by the property boundaries. Where the ground system of one tower intersects with the ground wires from another, the wires will be terminated in a transverse copper strap. Surrounding the base of each tower will be a 7.3 meters x 7.3 meters (24 feet X 24 feet) copper ground screen bonded to the full length ground wires.

By relocating to this site, a slight reduction in daytime power is required in compliance with the signal protection requirements of §173.182 and §73.187.<sup>3</sup> Specifically, WTOD was

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- 1) Operation on 1470 kHz with a four tower directional array at 1.0 kilowatt day and 0.7 kilowatt night.
  - 2) For the purposes of environmental analysis, only the radio frequency radiation evaluation was undertaken by Graham Brock, Inc. The applicant has or will review the balance of the environmental reviews (i.e., location of site near areas of historic importance, Indian or tribal areas, etc.). Once the reviews are complete, the Commission will be notified.
  - 3) §73.187 Limitation on daytime radiation.
    - (a)(1) Except as otherwise provided in paragraphs (a)(2) and (3) of this section, no authorization will be granted for a Class B or Class D station on a frequency specified in §73.25 if the proposed operation would radiate during the period of critical hours (the two hours after local sunrise and the two hours before local sunset) toward any point on the 0.1 mV/m contour of a co-channel U.S. Class A station, at or below the pertinent vertical angle determined from Curve 2 of Figure 6a of §73.190, values in excess of those obtained as provided in paragraph (b) of this section.
    - (2) The limitation set forth in paragraph (a)(1) of this section shall not apply in the following cases:
      - (i) Any Class B or Class D operation authorized before November 30, 1959; or
      - (ii) For Class B and Class D stations authorized before November 30, 1959, subsequent changes of facilities which do not involve a change in frequency, an increase in radiation toward any point on the 0.1 mV/m contour of a co-channel U.S. Class A station, or the move of transmitter site materially closer to the 0.1 mV/m contour of such Class A station.

originally licensed prior to 1959, the relocation of WTOD is not substantially closer to WQEW<sup>4</sup>, and the radiation in the direction of WQEW's 0.1 mV/m contour is less than presently authorized.

Nighttime operation of WTOD at the reduced power of 0.002 kilowatt is proposed. Although there is no requirement for a Class D facility to provide a specified contour over Toledo, included as Exhibit #1D are the proposed nighttime service contours. It is demonstrated in Exhibit #3 that no interference to other stations, operating, authorized or proposed, on 1560 kHz or adjacent channels will be created.

We have tried to be as accurate as possible in the preparation of this application. All information contained herein was extracted from the CDBS database. We assume no liability for omissions or errors in this source. Should there be any questions concerning the information contained herein, we welcome the opportunity to discuss the matter by phone at 912-638-8028 or by email at [rsg@grahambrock.com](mailto:rsg@grahambrock.com).

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4) The proposed relocation of WTOD is slightly farther from WQEW than the present authorization.