

Radio Frequency Field Level

This section evaluates the radio frequency field (“RFF”) exposure condition created by the operation of the proposed WOWK-DT, the licensed (modified) WOWK-TV operation, and construction permit WAMX(FM). As previously indicated, there are no AM stations located within one km of the existing WOWK-TV tower site. According to the FCC database, there are no other stations located within 500 meters. Access to the tower is prevented by a fence with a locked gate.

For NTSC, Channel 13, WOWK-TV will use its existing Dielectric, Type TW-9A13-R. The antenna manufacturer's data indicates that the elevation pattern for the antenna shows a maximum relative field of less than 0.1 towards the ground in the vicinity of the tower. Using this relative field factor and the procedures prescribed in OET Bulletin No. 65, the maximum RFF resulting from the NTSC operation at two meters above the base of the tower is calculated to be less than 0.8 microwatts/cm.² This is less than one percent of the 200 FW/sq. cm RFF exposure guideline for the general population.

For the DTV operation WOWK-DT proposes to use a Dielectric, Type TU-O5-12/60H-B or equivalent antenna as described above. The elevation pattern for this antenna shows a maximum relative field of less than 0.25 towards the ground in the vicinity of the tower. Using this relative field factor and the procedures prescribed in OET Bulletin No. 65, the maximum RFF resulting from the proposed operation is less than 0.19 uW/cm.² This is less than one percent of the 475 uW/cm.² MPE guideline for the general population.

WAMX(FM) specifies 1.65 kW for both horizontal and vertical polarization. Assuming the maximum relative field value of 1.0 toward the ground and the procedures described above, the maximum RFF contribution of the FM antenna 2 meters above the tower base is calculated to be less

than 0.02 FW/sq. cm or less than one percent of the 200 uW/cm² RFF exposure guidelines for the general population.

The total contribution by the NTSC station, the proposed DTV operation, and the FM CP at 2 meters above ground level is less than three percent of the current FCC guidelines for general population exposure. Authorized personnel and rigging contractors will be alerted to the potential zone of high radiation on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

The proposed operation based upon the current OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A meets the provisions of the FCC RFF guidelines, and thus, complies with Section 1.1307 of the FCC Rules.

Section 1.1307

The proposed operation based upon the current OET Bulletin No.65, Edition 97-01 dated August 1997 and Supplement A meets the provisions of the FCC radio frequency field guidelines, and thus, complies with Section 1.1307 of the FCC Rules.

An environmental assessment (EA) is categorically excluded under Section 1.1307 of the FCC Rules and Regulations since the applicant indicates:

- (a)(1) The existing facilities are not located in an officially designated wilderness area.
- (a)(2) The existing facilities are not located in an officially designated wildlife preserve.

- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.
- (a)(4) The proposed facilities will not affect any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The existing facilities are not located near any known Indian religious sites.
- (a)(6) The existing facilities are not located in a flood plain.
- (a)(7) The construction of the replacement tower at an existing site will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) Dual lighting is specified for the new tower.
- (b) Workers and the general public will not be subjected to RF radiation levels in excess of FCC standard. Authorized personnel will be alerted to areas of the tower where potential radiation levels are in excess of the FCC standard. A security fence with a locked gate deters unauthorized access to the tower site.