

Environmental Effects

Educational Media Foundation (“EMF”) certifies that WLKB complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

The RF worksheet in the Instructions to form 303-S was unusable to determine compliance for this facility because of the “worst case” nature of the worksheet. Therefore, EMF used RFHAZ, a commercial software package created by V-Soft Communications, to determine compliance for this site.

The site is shared with other FM broadcast facilities. These were each evaluated using the RFHAZ software. The results are as follows:

Call	Channel	COR AGL	ERP	EPA Antenna used	Max Pub (uW/cm ²)	Max	% of Max Pub
WLKB	206	113m	50kw	Vertical Dipole*	200	122.9	61.45
WSGW-FM	263	102m	3kw	EPA Type 3 Rototiller**	200	2.77	1.38
WTRK	215	106m	.43kw	EPA Type 3 Rototiller**	200	.227	.113
Totals						125.897	62.943

* In the interest of simplicity, the appropriate worst case antenna was used for this study. Since the site complies using this worst case value, no more detailed evaluation was performed.

** Per the FCC database, WSGW-FM uses an ERI manufactured G5CPM-2E antenna.

*** Per the FCC database, WTRK uses an ERI LPX-2E-HW antenna.

Since the antennas are mounted at different elevations and have a different number of bays, the maximum RF levels will not fall at the same distance from the tower. However, in the interest of simplicity, the maximum values were simply added. Since the site complies using this over-simplified math, no more detailed evaluation was performed.

Based on this evaluation, the site is currently approximately 63% of the public (uncontrolled) exposure limits and therefore fully complies with the FCC’s maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.