

Compliance with 47 C.F.R. 73.525

There are several considerations outlined in 47 C.F.R. 73.525 for TV Channel 6 protection. Outlined below are the various factors as they apply to the proposed operation and affected channel 6 stations, WLNS-TV and WCML.

1) Distance between proposed operation and affected channel 6

47 C.F.R. 73.525(a)(1) requires a minimum separation of 211 km for a channel 206 operation. The distance between the proposed station and WLNS-TV is 102.19 km. The distance between the proposed station and WCML is 175.76 km.

2) Population Limitation

When a proposed non-commercial station is not co-located with the channel 6 station question, the applicant is required to show that the interference area (as predicted by the procedures outlined in 47 C.F.R. 73.525(e)(1)) contains no more than 3,000 persons.

When an applicant wishes to use vertically polarized transmissions only, C.F.R. 74.525(e)(4) limits the vertical ERP to the maximum permissible horizontally polarized ERP multiplied by 40 (if the predicted interference area lies entirely outside the limits of a city of 50,000 persons) or 10 (if not). The maximum permissible horizontally polarized ERP for the proposed facility is 5 kilowatts (See Exhibits 18-B through 18-D). Since the predicted interference area lies partially within the limits of a city of 50,000 persons, that is multiplied by 10 to obtain the vertical-only ERP of 50 kilowatts specified in this application

The actual population figures are contained in Exhibit 18-B, and a map of the interference area is shown in Exhibit 18-C.

73.525 Compliance**WCML**

The interfering contour of the proposed operation does not cross the Grade B contour of WCML (see Exhibit 18-E), therefore there is no interference area.

WLNS

Population in the predicted interference area was determined using the centroid method and the 2000 census. The predicted interference contour (of the theoretical horizontal component of 5 kilowatts) crosses the WLNS channel 6 grade B (47 dBu F(50,50)) contour (see Exhibit 18-C).

The predicted interference contour is determined from 47 C.F.R. 73.599 Figure 1 for channel 206 to be 63.5 dBu (see Exhibit 18-D for a tabulation of the WLNS protected contour values and the corresponding channel 206 interfering contours).

Since the only network affiliation for WLNS is CBS, then per 47 C.F.R. §73.525(e)(3)(iii), the persons that meet the following criteria shall be subtracted: 1) located outside of WLNS's Area of Dominant Influence (ADI)¹, 2) outside WLNS's Grade A (68 dBu F(50,50)) field strength contour, and 3) within the predicted city grade (74 dBu F(50,50)) field strength contour for WNEM-TV (whose only network affiliation is also CBS).

Exhibit 18-C shows the 47 dBu F(50,50) contour for WLNS, the corresponding F(50,10) interfering contour for the proposed channel 206 facility, and the WNEM 74 dBu F(50,50) contour. The entire predicted interference area is within the WNEM city grade contour; thus, there is no applicable population within the interference area.

Therefore, the proposed operation is within the limitations of 47 CFR 73.525(c).

¹ Nielsen's current Designated Market Area (DMA) was used in place of the outdated ADI information.



Exhibit 18-C

WTRK.P

Latitude: 43-33-42 N
Longitude: 083-58-52 W
ERP: 5.00 kW
Channel: 206
Frequency: 89.1 MHz
AMSL Height: 296.0 m
Horiz. Pattern: Directional

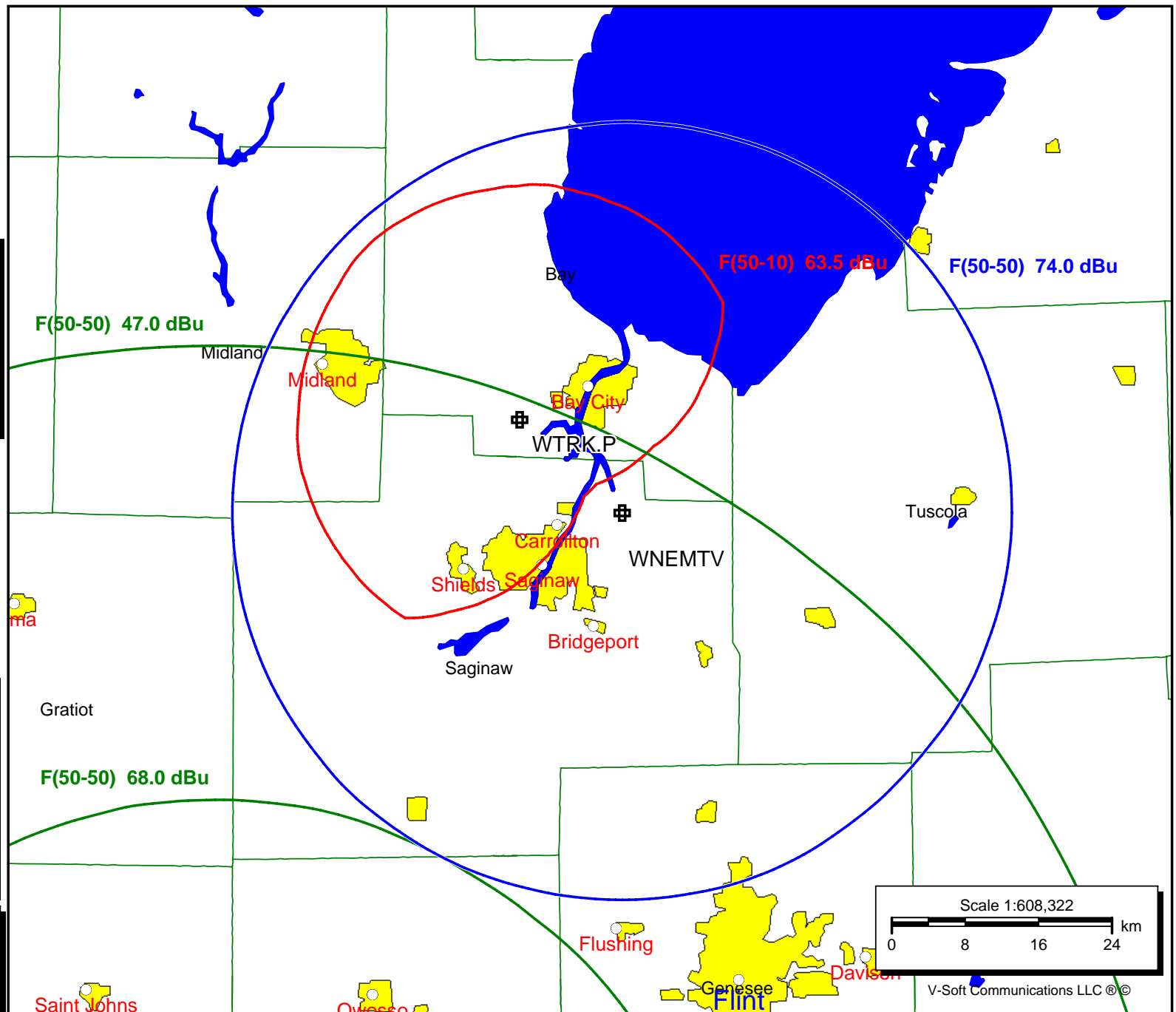
WLNSTV

BLCT20020103AAA
Latitude: 42-41-19 N
Longitude: 084-22-35 W
ERP: 100.00 kW
Channel: 06-
Frequency: 84.5 MHz
AMSL Height: 577.0 m
Horiz. Pattern: Omni

WNEMTV

BLCT1961
Latitude: 43-28-13 N
Longitude: 083-50-35 W
ERP: 100.00 kW
Channel: 05-
Frequency: 78.5 MHz
AMSL Height: 488.0 m
Horiz. Pattern: Omni

- WTRK.P
- WLNSTV
- WNEMTV



Channel 6 vs. Channel 206

Channel 6 Contour	Value from 73.599	Channel 206 Contour	Adjusted 6 dB
47 (grade B)	16.5	63.5	69.5
48	15.3	63.3	69.3
49	14.2	63.2	69.2
50	13.1	63.1	69.1
51	12.2	63.2	69.2
52	11.3	63.3	69.3
53	10.5	63.5	69.5
54	9.7	63.7	69.7
55	9.0	64.0	70.0
56	8.3	64.3	70.3
57	7.7	64.7	70.7
58	7.1	65.1	71.1
59	6.5	65.5	71.5
60	6.0	66.0	72.0
61	5.5	66.5	72.5
62	5.0	67.0	73.0
63	4.5	67.5	73.5
64	4.0	68.0	74.0
65	3.7	68.7	74.7
66	3.3	69.3	75.3
67	2.8	69.8	75.8

Channel 6 Contour	Value from 73.599	Channel 206 Contour	Adjusted 6 dB
68 (grade A)	2.5	70.5	76.5
69	2.3	71.3	77.3
70	2.0	72.0	78.0
71	1.7	72.7	78.7
72	1.4	73.4	79.4
73	1.3	74.3	80.3
74	0.9	74.9	80.9
75	0.7	75.7	81.7
76	0.5	76.5	82.5
77	0.4	77.4	83.4
78	0.1	78.1	84.1
79	-0.1	78.9	84.9
80	-0.2	79.8	85.8
81	-0.4	80.6	86.6
82	-0.6	81.4	87.4
83	-0.7	82.3	88.3
84	-0.9	83.1	89.1
85	-1.1	83.9	89.9
86	-1.2	84.8	90.8
87	-1.4	85.6	91.6
88	-1.6	86.4	92.4
89	-1.7	87.3	93.3
90	-1.8	88.2	94.2



Exhibit 18-E

WTRK.P

Latitude: 43-33-42 N
Longitude: 083-58-52 W
ERP: 5.00 kW
Channel: 206
Frequency: 89.1 MHz
AMSL Height: 296.0 m
Horiz. Pattern: Directional

