

Compliance with 47 C.F.R. 73.525

Introduction

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 WRTV.

Distance between proposed operation and WRTV

47 C.F.R. 73.525(a)(1) requires a minimum separation of 257 kilometers for a channel 202 operation. The distance between the proposed station and WRTV is 71.85 kilometers.

Population Limitation

When a proposed non-commercial station is not co-located with the channel 6 station in 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. The actual population figures are contained in Exhibit 19-B, and a map of the interference area is shown in Exhibit 19-A.

Vertically Polarized Transmissions

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 0.025 kilowatts (See Exhibit 19-A). Since the predicted interference area lies entirely outside the limits of a city of 50,000 persons, that is multiplied by 40 to obtain the vertical-only ERP of 1.0 kilowatts specified in this application.

Discussion

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 0.025 kilowatts) is contained within the WRTV channel 6 grade B (47 dBu F(50,50)) contour (see Exhibit 19-A).

The predicted interference contour is determined from 47 C.F.R. 73.599 for channel 202 to range from 57.8 dBu to 60.5 dBu. (See Exhibit 19-C for a tabulation of the WRTV protected contour values and the corresponding channel 202 interfering contours)

Exhibit 19-A shows the 58 dBu through 62 dBu F(50,50) contours for WRTV. Also shown are the corresponding F(50,10) interfering contours for the proposed channel

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Exhibit 19
Muncie, IN

202 facility. This map also shows the interpolated interfering contour determined from connecting the intersections of the WRTV protected contours and the corresponding interfering contours of the proposed facility (see 47 C.F.R 73.525(e)(1)(ii)).

Additionally shown in exhibit 19-A is a population scattergraph of the area of proposed operation. A population report of the area contained within the interpolated interfering contour is included at Exhibit 19-B. The total population contained within the interfering contour is 2,781 persons.

Conclusion

For the reasons outlined above, the proposed operation fully complies with the provisions of 47 C.F.R. 73.525.

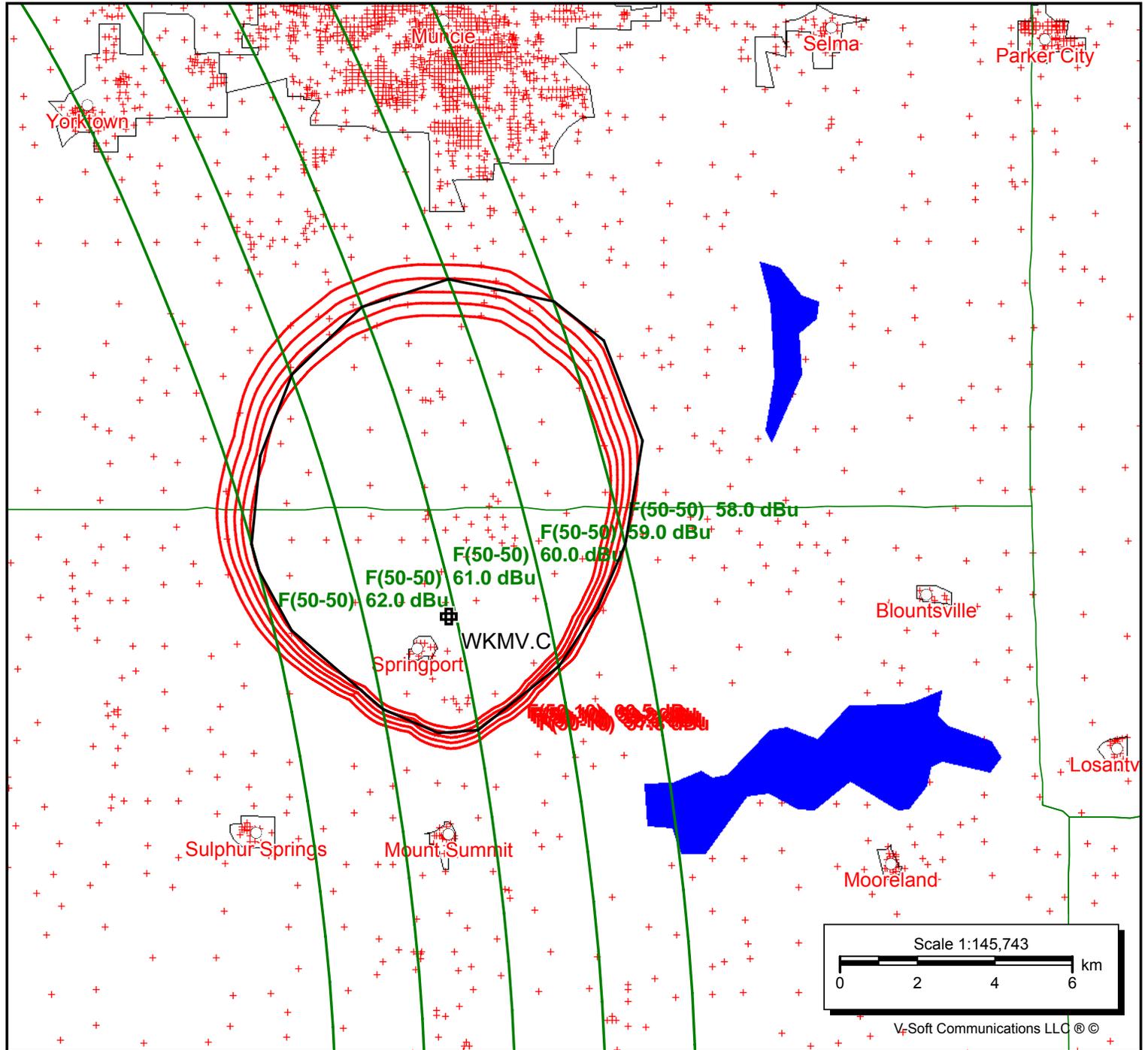
Exhibit 19-A

WKMV.C

Latitude: 40-03-18 N
Longitude: 085-23-05 W
ERP: 0.025 kW
Channel: 20Z
Frequency: 88.3 MHz
AMSL Height: 414.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

WRTV

BMLCT20050414ABE
Latitude: 39-53-56.50 N
Longitude: 086-12-03.70 W
ERP: 100.00 kW
Channel: 06Z
Frequency: 85.0 MHz
AMSL Height: 534.0 m
Horiz. Pattern: Omni
Vert. Pattern: Yes
Elec Tilt: 1.1



Scale 1:145,743



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Population Report

Polygon Population Report

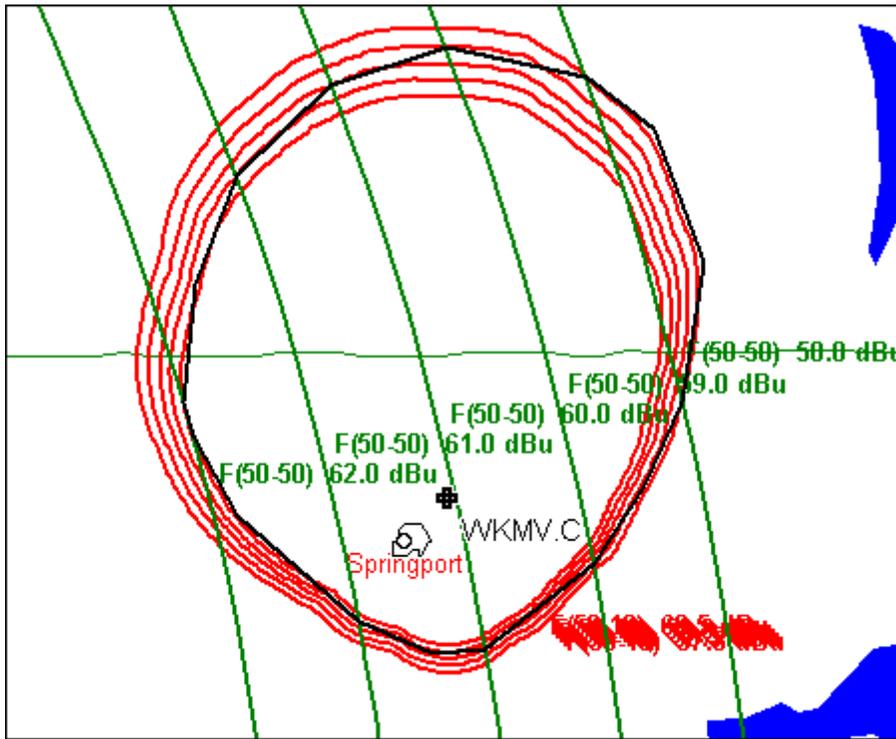
Population Database: 2000 US Census (SF1)

Total Population: 2,781

Housing Units: 1,088

Polygon Area: 87.08 sq. km

Interpolated Interfering Contour



Channel 6 vs Channel 202

Channel 6 Contour	Value from 73.599	Channel 202 Contour	Adjusted 6 dB
47 (grade B)	3.8	50.8	56.8
48	3.5	51.5	57.5
49	3	52	58
50	2.6	52.6	58.6
51	2.2	53.2	59.2
52	1.8	53.8	59.8
53	1.5	54.5	60.5
54	1.1	55.1	61.1
55	0.8	55.8	61.8
56	0.5	56.5	62.5
57	0	57	63
58	-0.2	57.8	63.8
59	-0.5	58.5	64.5
60	-0.8	59.2	65.2
61	-1.2	59.8	65.8
62	-1.5	60.5	66.5
63	-1.7	61.3	67.3
64	-2.1	61.9	67.9
65	-2.3	62.7	68.7
66	-2.5	63.5	69.5
67	-2.7	64.3	70.3

Channel 6 Contour	Value from 73.599	Channel 202 Contour	Adjusted 6 dB
68 (grade A)	-2.9	65.1	71.1
69	-3.1	65.9	71.9
70	-3.2	66.8	72.8
71	-3.3	67.7	73.7
72	-3.5	68.5	74.5
73	-3.6	69.4	75.4
74	-3.7	70.3	76.3
75	-3.8	71.2	77.2
76	-3.9	72.1	78.1
77	-4	73	79
78	-4.1	73.9	79.9
79	-4.2	74.8	80.8
80	-4.3	75.7	81.7
81	-4.4	76.6	82.6
82	-4.5	77.5	83.5
83	-4.5	78.5	84.5
84	-4.6	79.4	85.4
85	-4.7	80.3	86.3
86	-4.8	81.2	87.2
87	-4.9	82.1	88.1
88	-5	83	89
89	-5	84	90
90	-5.1	84.9	90.9