

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 the following facilities:

Facility	Status
KRMATV	License
KRMATV	Construction Permit

Distance between proposed operation and KRMATV (LIC & CP)

47 C.F.R. 73.525(a)(1) requires a minimum separation of 265 kilometers for a channel 201 operation. The distances between the proposed station and the stations in question are as follows:

Facility	Status	Distance to Proposed Station
KRMATV	License	7.06 km
KRMATV	Construction Permit	0.24 km

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-C, and a map of the interference area is shown in Exhibit 19-A for the KRMATV license and Exhibit 19-B for the KRMATV construction permit.

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 facilities is 0.03 kilowatts (See Exhibit 19-A and 19-B). 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 1.2 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 0.03 kilowatts) is contained within the KRMATV channel 6 grade B (47 dBu F(50,50)) contour (see Exhibit 19-A and Exhibit 19-B).

The predicted interference contour for the KRMATV license is determined from 47 C.F.R. 73.599 for channel 201 to be the 83.5 dBu. (See Exhibit 19-D for a tabulation of the KRMATV protected contour values and the corresponding channel 201 interfering contours)

Exhibit 19-A shows the 90 dBu F(50,50) contour for KRMATV. Also shown is the corresponding F(50,10) interfering contour for the proposed channel 201 facility.

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-C. The total population contained within the interfering contour is 115 persons.

The predicted interference contour for the KRMATV construction permit is determined from 47 C.F.R. 73.599 for channel 201 to range from 48.0 dBu to 83.5 dBu. (See Exhibit 19-D for a tabulation of the construction permits protected contour values and the corresponding channel 201 interfering contours)

Exhibit 19-B shows the 47 dBu through 90 dBu F(50,50) contours for KRMATV's construction permit. Also shown are the corresponding F(50,10) interfering contours for the proposed channel 201 facility. This map also shows the interpolated interfering contour determined from connecting the intersections of the construction permits 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-B 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-C. The total population contained within the interfering contour is 401 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

KFDN

Latitude: 39-40-18 N
Longitude: 105-13-05 W
ERP: 0.03 kW
Channel: 201
Frequency: 88.1 MHz
AMSL Height: 2348.1 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

KRMATV

BLET19950504KE
Latitude: 39-43-49 N
Longitude: 105-15-00 W
ERP: 100.00 kW
Channel: 06-
Frequency: 84.5 MHz
AMSL Height: 2349.0 m
Horiz. Pattern: Omni
Vert. Pattern: Yes
Elec Tilt: 1.5
Prop Model: None

Contour Color Legend

■ KFDN
■ KRMATV

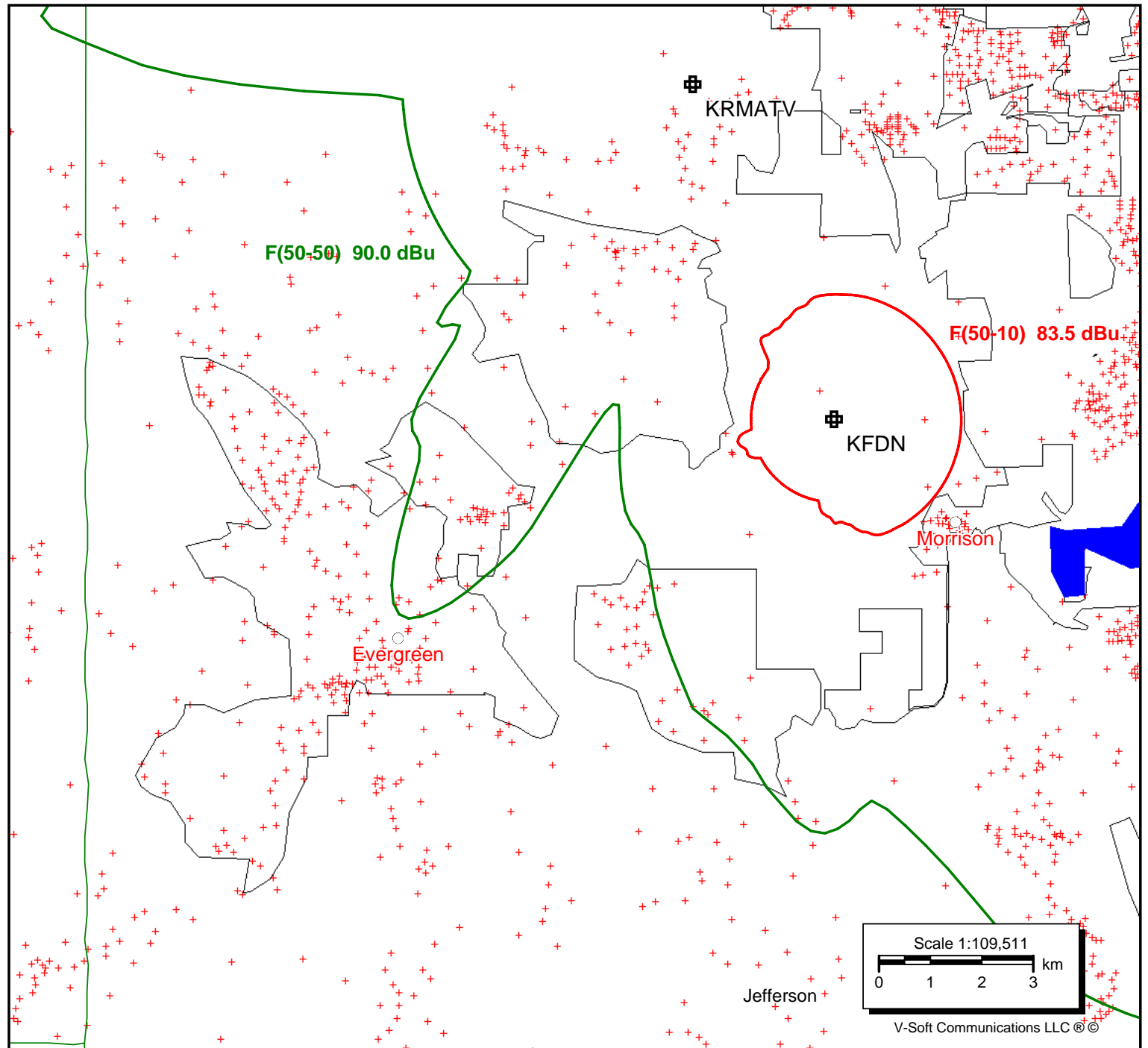


Exhibit 19 - B

KFDN

Latitude: 39-40-18 N
Longitude: 105-13-05 W
ERP: 0.03 kW
Channel: 201
Frequency: 88.1 MHz
AMSL Height: 2348.1 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

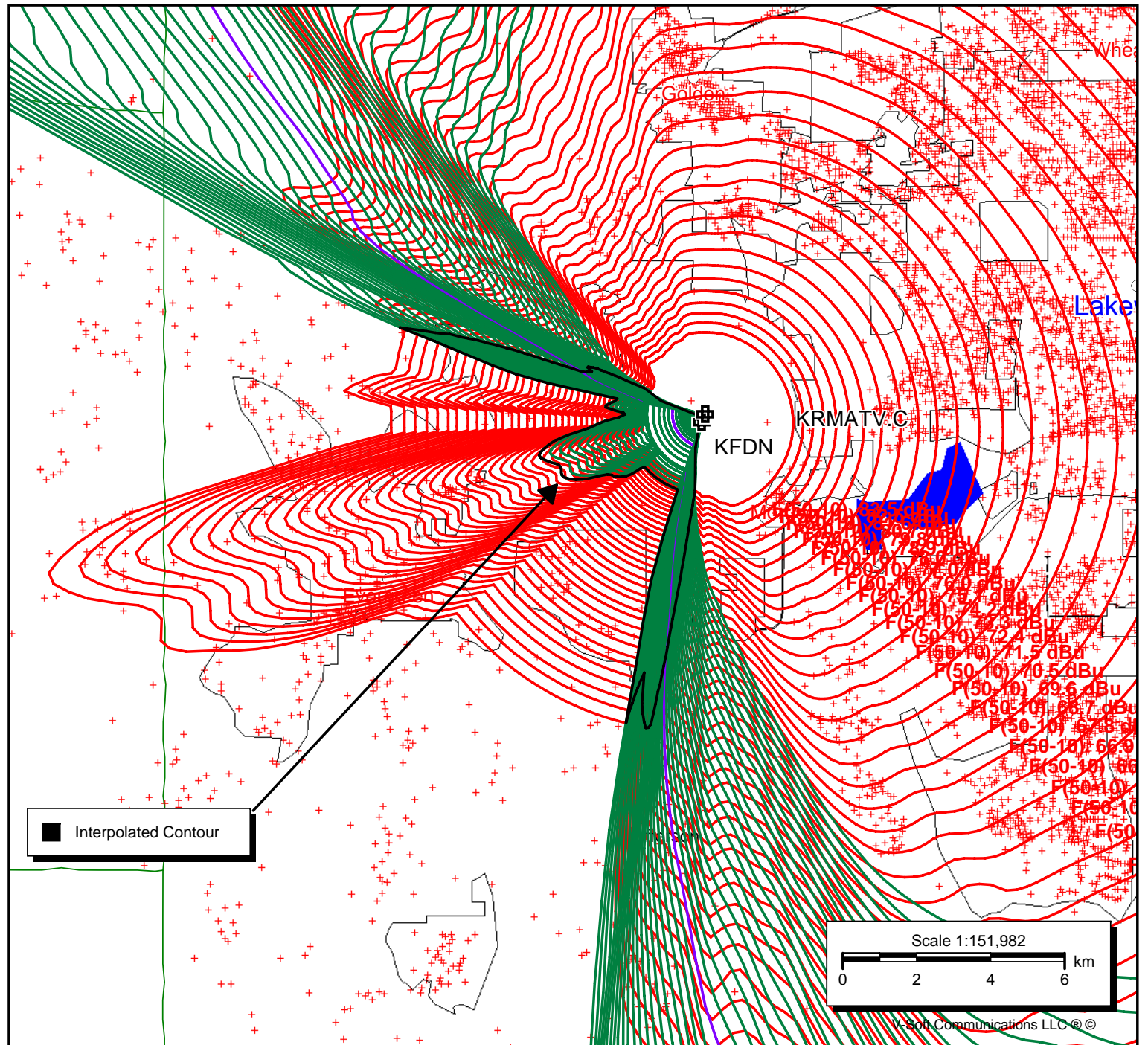
KRMATV.C

BPET19990107KE
Latitude: 39-40-25 N
Longitude: 105-13-01 W
ERP: 100.00 kW
Channel: 06-
Frequency: 84.5 MHz
AMSL Height: 2363.0 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 0.0

Corresponding Contour Color Legend

■ KFDN
■ KRMATV.C

■ Interpolated Contour



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Exhibit 19 - C

Lakewood, CO

Population Report

KFDN vs KRMATV (license)

Contour Parameters:

Type: FCC Contour

F(50-10) FS: 83.50 dBu [360 Radials]

Population Database: 2000 US Census (SF1)

Transmitter Information:

Call Letters: KFDN

Latitude: 39-40-18 N

Longitude: 105-13-05 W

ERP: 0.03 kW

Channel: 201

Frequency: 88.1 MHz

AMSL Height: 2348.1 m

Elevation: 2237.8 m

HAAT: 321.08 m

Horiz. Antenna Pattern: Omni

Vert. Elevation Pattern: No

Total Population Within Contour: 115

Total Area Within Contour: 14.46 sq. km

KFDN vs KRMATV (construction permit)

Polygon Population Report

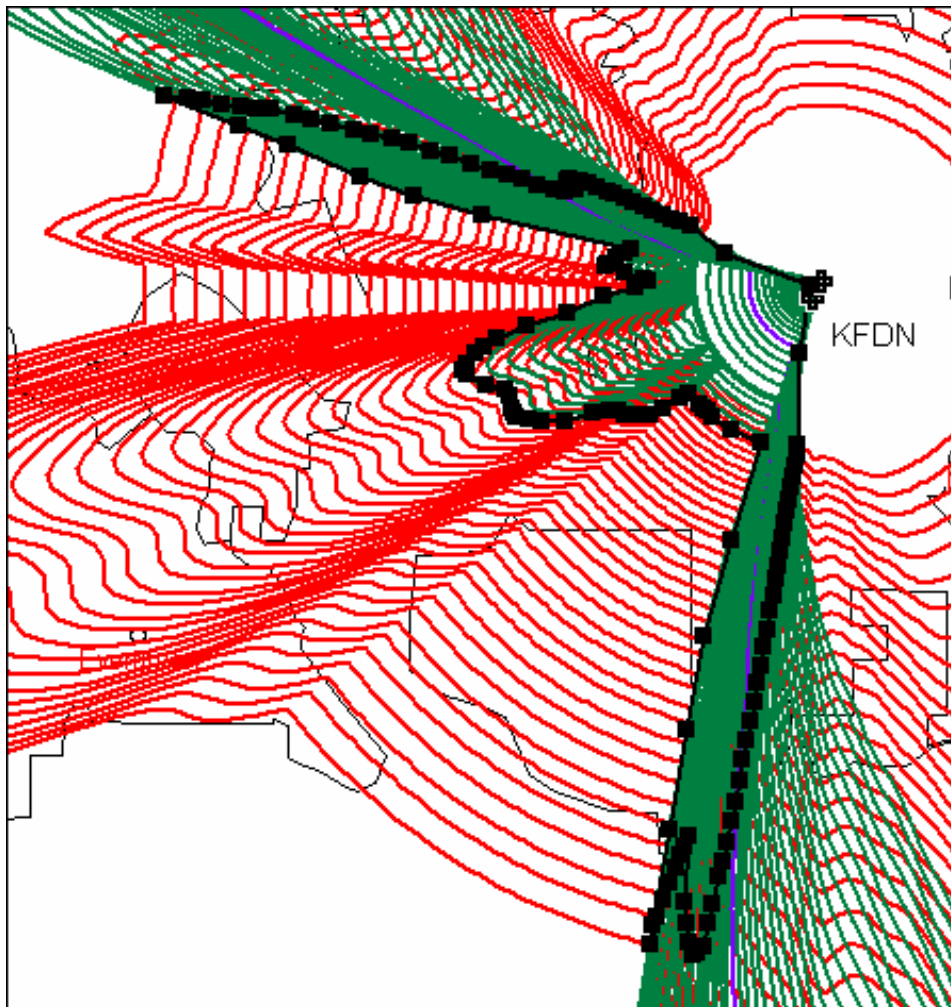
Population Database: 2000 US Census (SF1)

Total Population: 401

Housing Units: 154

Polygon Area: 14.17 sq. km

Interpolated Interfering Contour



Channel 6 vs Channel 201

Channel 6 Contour	Value from 73.599	Channel 201 Contour
47 (grade B)	1	48
48	0.7	48.7
49	0.3	49.3
50	0	50
51	-0.3	50.7
52	-0.6	51.4
53	-1	52
54	-1.2	52.8
55	-1.5	53.5
56	-1.8	54.2
57	-2	55
58	-2.4	55.6
59	-2.6	56.4
60	-3	57
61	-3.2	57.8
62	-3.5	58.5
63	-3.6	59.4
64	-3.9	60.1
65	-4.1	60.9
66	-4.3	61.7
67	-4.5	62.5

Channel 6 Contour	Value from 73.599	Channel 201 Contour
68 (grade A)	-4.6	63.4
69	-4.7	64.3
70	-4.9	65.1
71	-5	66
72	-5.1	66.9
73	-5.2	67.8
74	-5.3	68.7
75	-5.4	69.6
76	-5.5	70.5
77	-5.5	71.5
78	-5.6	72.4
79	-5.7	73.3
80	-5.8	74.2
81	-5.9	75.1
82	-6	76
83	-6	77
84	-6	78
85	-6.1	78.9
86	-6.2	79.8
87	-6.3	80.7
88	-6.4	81.6
89	-6.5	82.5
90	-6.5	83.5