

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 960624KT-TV.

1. Distance between proposed operation and 960624KT-TV

47 C.F.R. 73.525(a)(1) requires a minimum separation of 211 kilometers for a channel 206 operation. The distance between the proposed station and 960624KT-TV is 2.25 kilometers.

2. 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 18-B, and maps of the interference area are shown in Exhibits 18-C and 18-D.

3. 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 0.0375 kilowatts (See Exhibits 18-B through 18-D). 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 1.5 kilowatts specified in this application.

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

73.525 Compliance

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 0.0375 kilowatts) crosses the 960624KT 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 for channel 206 to range from 63.5 dBu to 88.2 dBu. (See Exhibit 18-F for a tabulation of the 960624KT protected contour values and the corresponding channel 206 interfering contours)

Exhibit 18-C shows the 47 dBu through 90 dBu F(50,50) contours for 960624KT. Also shown are the corresponding F(50,10) interfering contours for the proposed channel 209 facility. This map also shows the interpolated interfering contour determined from connecting the intersections of the 960624KT protected contours and the corresponding interfering contours of the proposed facility (see 47 C.F.R 73.525(e)(1)(ii)).

Exhibit 18-D shows only the 960624KT Grade B contour and the proposed operation's interpolated interfering contour. Additionally shown 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 18-E. The total population contained within the interfering contour is 152 persons.

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



Exhibit 18-C

KCPP.P

Latitude: 42-44-03 N
Longitude: 106-20-00 W
ERP: 0.0375 kW
Channel: 206
Frequency: 89.1 MHz
AMSL Height: 2527.0 m
Elevation: 2472.0 m
Horiz. Pattern: Omni
Vert. Pattern: No

960624KT

BPET19960624KT
Latitude: 42-44-26 N
Longitude: 106-21-34 W
ERP: 0.331 kW
Channel: 06+
Frequency: 85.5 MHz
AMSL Height: 2501.0 m
Elevation: 2426.63 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 0.0

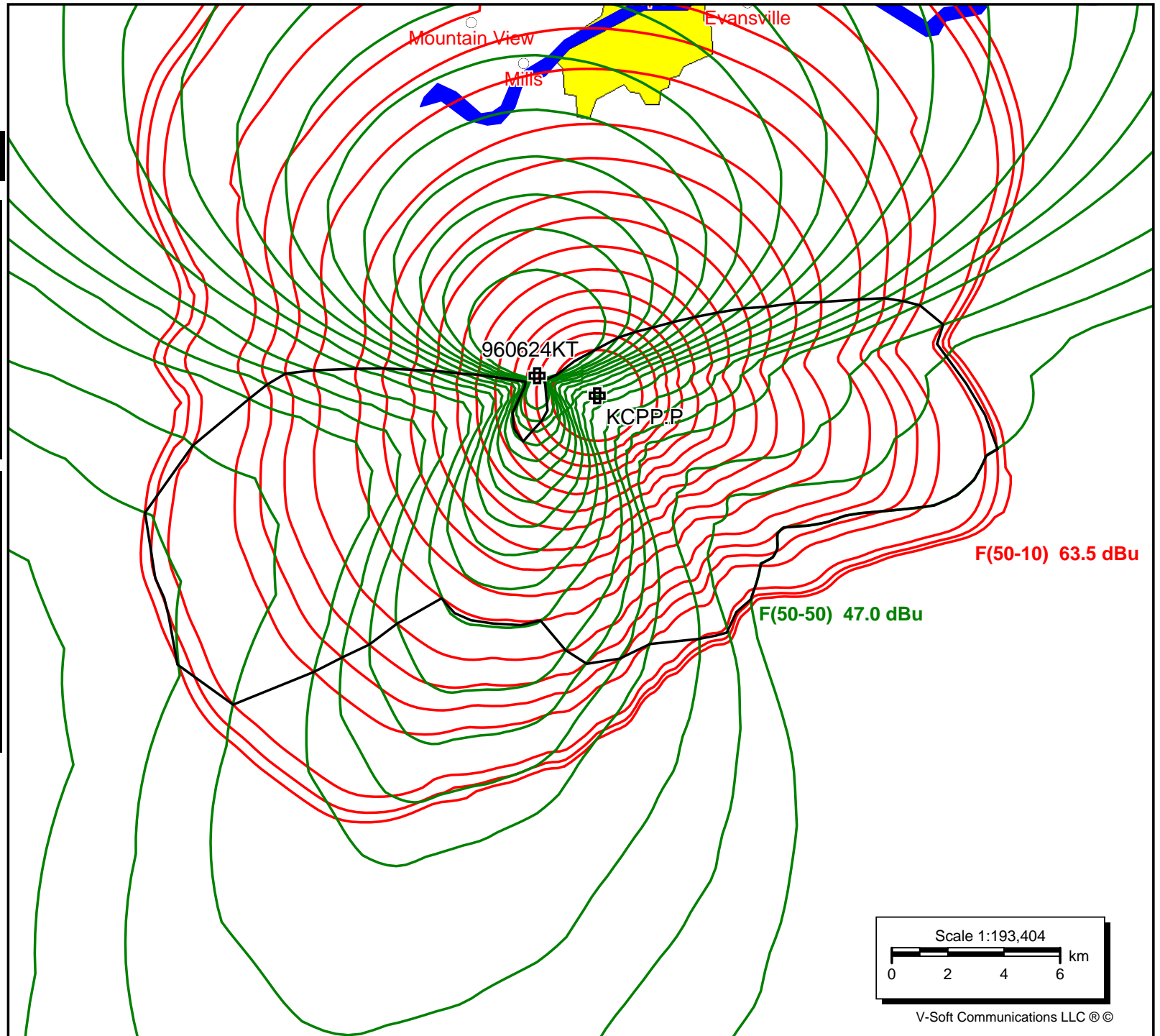




Exhibit 18-D

KCPP.P

Latitude: 42-44-03 N
Longitude: 106-20-00 W
ERP: 0.0375 kW
Channel: 206
Frequency: 89.1 MHz
AMSL Height: 2527.0 m
Elevation: 2472.0 m
Horiz. Pattern: Omni
Vert. Pattern: No

960624KT

BPET19960624KT
Latitude: 42-44-26 N
Longitude: 106-21-34 W
ERP: 0.331 kW
Channel: 06+
Frequency: 85.5 MHz
AMSL Height: 2501.0 m
Elevation: 2426.63 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 0.0

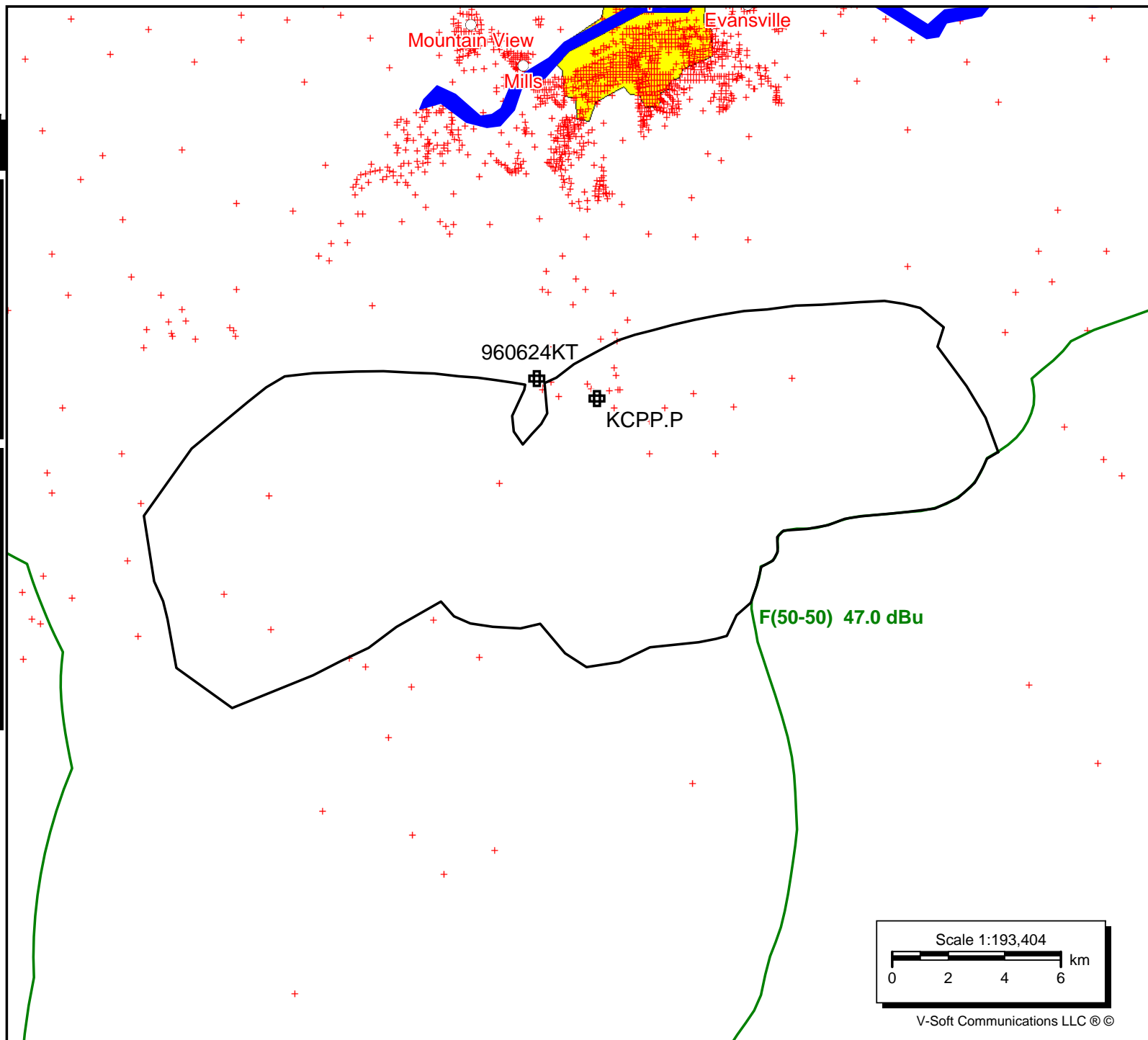


Exhibit 18-E

Polygon Population Report

Total Population: 152

Housing Units: 276

Polygon Area: 265.82 sq. km

	Housing Units	Population
Wyoming		
Natrona County		
Polygon	276	152

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